

QH  
1  
B695  
NH

Index

v25-30

BOMBAY NATURAL  
HISTORY SOCIETY  
JOURNAL,

GENERAL INDEX FOR

v. 1-13 inclusive

v. 14-17 bound with

v. 17, 1906

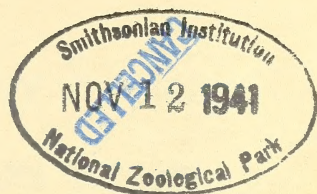
v. 18-24 inclusive

v. 25-30 inclusive



# JOURNAL

## BOMBAY NATURAL HISTORY SOCIETY



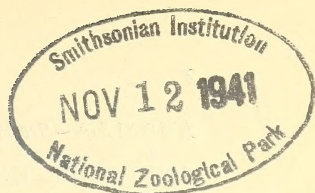
### GENERAL INDEX OF SUBJECTS AND AUTHORS



FOR VOLS. XXV—XXX INCLUSIVE

MADRAS  
PRINTED AT THE DIOCESAN PRESS  
1928





# JOURNAL

## Bombay Natural History Society

### GENERAL INDEX OF SUBJECTS AND AUTHORS FOR VOLS. XXV TO VOL. XXX INCLUSIVE

ABERCROMBY, A. F.—Crocodile (*C. palustris*) burying its Food, xxviii, 553 ;  
The Senses of a Snake, xxviii, 812.

ACCOUNTS—For 1916, xxv, 321 ; for 1917, xxv, 73 ; for 1918, xxvi, 1051 ;  
for 1921, xxviii, 568 ; for 1923, xxix, 1069.

ACWORTH, E. C. B.—Flight of Locusts (plate), xxv, 301.

AITKEN, E. H.—Injury feigning Habits of Birds, xxviii, 535.

AIYER, T. V. RAMAKRISHNA, B.A., F.E.S., F.Z.S.—A Catalogue of New  
Wasps and Bees, Part III, xxv, 92 ; Some South Indian Coccids of Economic  
Importance (4 plates), xxvi, 621 ; An Undescribed Natural Enemy of *Castor*  
*semilooper* (*Achaza ophinsa melicerte*), xxviii, 298.

AJREKAR, B. A.—On the Identity of *Blastospora butleri*, Syd. (plate), xxvi,  
696.

ALLEN, C. W.—Jackals in Lower Burma, xxv, 146 ; Life-history of the  
*Antheriza roylei* (Oak Emperor Moth), xxvi, 300.

ALLEN, G. O., I.C.S.—Natural Death of a Fox (*V. bengalensis*), xxvi, 660 ;  
Occurrence of *Calotis vestalis* and *amata* at Unao, xxvi, 868 ; Naini Tal But-  
terfly Notes, xxvi, 870 ; The Malabar Pied Hornbill (*Anthraceroceros coronatus*)  
in Mirzapur, U. P., xxvi, 671 ; The Cuckoo (*Cuculus canorus*) in Mirzapur,  
U. P., xxvi, 671 ; Habits of the Painted Sandgrouse (*Pterocles fasciatus*),  
xxvi, 672 ; The Great Indian Bustard (*Eupodotis edwardsi*) in Mirzapur,  
U.P., xxvi, 673 ; Habits of Earthworms, xxvi, 879 ; The Habits of the  
Tree-frog (*Rhacophorus maculatus*), xxvi, 681 ; Some Butterflies taken in  
Benares and Adjoining Districts, xxvi, 689 ; Tenacity of Life of *Parapolybia*  
*orientalis*, xxvi, 693 ; Protective Habits of the Larva of *Trypanophora*  
*semihyalena*, xxvi, 693 ; A Few Additions to the List of Mussoorie Plants,  
by James Martin, xix, 475, xxvi, 695 ; Caracal (*Felis caracal*) and  
Hunting Leopard (*Cynelurus jubatus*) in Mirzapur, U.P., xxvi, 1041 ; Birds  
of different Species nesting in Company, xxvi, 1044 ; The Red Turtle Dove  
(*Eupopelia t. tranquebarica*) in Unao, U. P., xxvi, 1044 ; Accidents to  
Vultures, xxvi, 1045 ; Hovering Habits of the Spotted Owlet (*Athene*  
*brahma*), xxvi, 1045.

AMBALLA—*See* BIRDS.

ANDERSON, KNUD, F.Z.S.—On the Determination of Age in Bats, xxv, 249; On the so-called Colour Phases of the Rufous Horseshoe Bat of India (*Rhinolophus rouxi*), xxv, 260.

ANNANDALE, N., D.Sc., F.A.S.B.—Fish and Fishing in the Inle Lake (plates), xxviii, 1038.

ANTS—*See* HYMENOPTERA.

ARABIA—*See* MAMMALS.

ARACHNIDS—

SCORPIONS—Notes on Flying White-ants and Scorpions that feed on them, xxvi, 873; The Black Rock Scorpion, *Palamnæus swammerdami*, xxviii, 558; Scorpions committing Suicide, xxviii, 559.

SPIDERS—The Great Indian Spiders, Genus *Pacilotheria*, xxv, 153; Examples of Mimicry in Spiders, xxv, 760; Mimicry in Spiders, xxvi, 302; The Snare of the Giant Wood Spider (*Nephila maculata*), Part I, xxviii, 642; Parts II and III, xxviii, 911 and 917; Part IV, xxix, 70; Occurrence of the Galeod Spider (*Rhagodes nigrocinctus*) in the South Arcot District, Madras Presidency, xxviii, 815; Common Indian Spiders, xxviii, 1045.

ARCOT—*See* SPIDERS.

ASSAM—*See* MAMMALS, BIRDS.

BAGNALL, MAJOR R.—Large Carp from Mesopotamia, xxvi, 679.

BAHAWALPUR—*See* BIRDS.

BAKER, E.C. STUART, F.L.S., F.Z.S., M.B. O.U.—The Game Birds of India, Burma and Ceylon (*see* BIRDS, systematic). Sub-species and the Field Naturalist, xxvi, 518; The Power of Scent in Wild Animals, xxvii, 112; The Birds of the Indian Empire, Parts I-VIII (*see* BIRDS, systematic).

BAKER, Lt.-Col. H. R., I.A.—A Day's Shooting on the Nilgiris near Ootacamund (plates), xxviii, 434; Occurrence on the Nilgiris of a partial Albino of the Southern India Scimitar Babbler (*Pomatorhinus horsfieldi travancoriensis*), xxviii, 1135.

BALUCHISTAN—*See* BOTANY.

BANGALORE—*See* SNAKES.

BANNERJI, G. E.—Note on the Cotton Tree (*Bombax malabaricum*), xxvii, 965.

BANNERMAN, SURGEON-GENERAL, W.B., C.S.I., I.M.S.—Capturing Tiger with Birdlime, xxv, 753; Notes on the Habits of the Death's Head Moth (*Acherontia styx*), xxv, 759; Cultivation of the Edible Date Palm (*Phoenix dactylifera*) in South India, xxvi, 763.

BARNETT, W. G.—Curious Position of a Dove's Nest (photo), xxv, 507.

BASIL-EDWARDS, S.—Behaviour of the White-cheeked Bulbul (*Molpastes leucogenys*) when its young is in danger; and the (?) parental instinct or

love for the offspring displayed by the Dark-grey Bush-Chat (*Oreicola ferrea*), xxviii, 280 ; On the Habits of a Sceliphron Wasp (*Sceliphron deformis*) xxviii, 293 ; On the Homing Flight of the Common House Crow (*Corvus splendens*), xxviii, 804 ; Nidification of the Himalayan Tree-creeper (*Certhia ruficeps*), xxix, 557 ; On the Occurrence of the Large Brown Thrush (*Zoothera monticola*) in Simla, xxvii, 401 ; Large Flock of the Comb Duck (*Sarcidiornis melanonotus*) in the Allahabad District of the U.P., xxvii, 638 ; see Dover, C.

BATS—See MAMMAL, *Habits*.

BEADNELL, C. B.—Panthers and Artificial Light, xxviii, 265 ; Note on the Nesting Habits of the Spotted Babbler (*Pellorneum ruficeps*), xxix, 292.

BEEES—See INSECTS, HYMENOPTERA.

BEESON, C. F. C., M.A., I.F.S.—Nesting of *Vespa dorylloides*, Saus, xxvi, 301.

BEHAR—See BIRDS.

BELL, T. R., I.F.S.—The Common Butterflies of the Plains of India, Parts xix-xxviii, See INSECTS, BUTTERFLIES.

BENARES—See INSECTS, BUTTERFLIES.

BENGAL—See BIRDS.

BENSON, CAPT. C. E.—Egret Farming in Sind (plates), xxviii, 748.

BEST, HON'BLE J. W.—Review—Shikar Notes for Novices, xxvii, 616.

BETHAM, BRIG.-GENERAL R. M.—The White-cheeked Bulbul (*Mol-pastes leucogenys*), xxvi, 286 ; The Desert Lark (*Alaemon desertorum*), xxvii, 400 ; Breeding of the Indian Pitta (*Pitta brachyura*) and the Streaked Wren Warbler (*Prinia lepida*), xxviii, 1135.

BERTHON, LT. H. W.—Occurrence of the Common Sheldrake (*Tadorna cornuta*) and the Marbled Duck (*Marmaronetta angustirostris*) in Kathiawar, xxvi, 674.

#### BIRDS (GEOGRAPHY)—

PERSIA.—Notes on the Bird Life of Ahwaz, Persia, xxv, 303 ; Notes on the Birds of Northern and Western Persia, xxvii, 844 ; Zoological Investigations in the Persian Gulf and Iraq, xxviii, 1108 ; Birds of the Persian Gulf Islands, xxx, 725.

MESOPOTAMIA.—Some Notes on the Game Birds in Mesopotamia, xxv, 486 ; Crows in Busrah, xxv, 741 ; Close-barred Sandgrouse at Muscat, xxv, 751 ; The Mesopotamian Bulbul, xxvi, 279 ; Sandgrouse in Mesopotamia, xxvi, 672 ; List of Birds observed in the Euphrates Valley, xxvi, 677 ; Some Birds of Prey of Mesopotamia, xxvi, 845 ; Mesopotamian Bird Notes, xxvi, 860 ; xxvii, 173 ; The Birds of Mesopotamia, xxviii, 210, Part II, xxviii, 381 ; Part III, xxviii, 650 ; Part IV, xxviii, 937 ; Notes on the Nightjar (*Caprimulgus ægypticus*), xxvi, 1043 ; The Red-breasted Goose (*R. ruficollis*) in Mesopotamia, xxx, 228.

TIBET—Notes on the Nidification of certain Birds in Ladak, xxvii, 141; Ornithological Notes from a Trip in Ladak, xxix, 694; The Range of the Tufted Pochard (*Fuligula fuligula*), xxix, 839.

KASHMIR—Spot-billed Duck in Kashmir, xxvi, 675; Kashmir Bird Notes, xxviii, 276; A Contribution to the Ornithology of Cashmere, xxviii, 990; Small Game Shooting in Kashmir and the Adjacent Hill Provinces, xxix, 653; Notes on Hugh Whistler's 'A Correction to the Ornithology of Cashmere' in vol. xxviii, No. 4, xxix, 798; The Mammals and Birds of Kashmir and Adjacent Hill Provinces, Part I, xxix, 879; Part II, xxx, 118; Part III, xxx, 253; Part IV, xxx, 509; Part V, xxx, 719; Notes on the Ornithology of Kashmir, xxx, 471; Bird Notes in Kashmir in Winter, xxx, 473; Bird Life in Gulmarg, xxix, 493.

PUNJAB—The Raptores of the Punjab, xxv, 231; The Breeding of the Gull-billed Tern (*Sterna anglica*), xxv, 300; Occurrence of the Indian Pitta (*Pitta brachyura*) in the Kangra District Punjab, xxv, 497; Extension of the Habitat of the Hair-crested Drongo (*Chibia hottentotta*), xxv, 500; Occurrence of the Pink-headed Duck (*Rhodonessa caryophyllacea*) in the Punjab, xxv, 502; Notes on the Birds of the Ambala District, Punjab, xxv, 665; The White-necked Stork in the Punjab, xxv, 746; Notes on the Birds of the Ambala District, Punjab, Part II, xxvi, 172; Part III, xxvi, 675; The Birds of Prey of the Punjab, Part I, xxvi, 247; Part II, xxvi, 629; Part III, xxvi, 826; Part IV, xxvi, 1000; Part V, xxvii, 128; Part VI, xxvii, 280; Part VII, xxvii, 606; The Common Hawk-Cuckoo (*Hierococcyx varius*) in the Punjab, xxvi, 287; Some Birds of Ludhiana District, Punjab, xxvi, 585; A List of Birds found in the Simla Hills, 1908-1918, xxvi, 601; Some Birds observed at Fagoo, near Simla, xxvi, 770; Variety of the Common House Crow (*Corvus splendens*) at Jhang, Punjab, xxvi, 843; A Note on the Breeding of the Hill Partridge (*Arboricola torqueola*) near Simla, xxvi, 849; Further Notes on Birds about Simla, xxvii, 94; Some Notes on the Genus *Caprimulgus* in the Punjab, xxvii, 363; On the Occurrence of the Large Brown Thrush (*Zoothera monticola*) in Simla, xxvii, 401; A List of Birds from Dharmasala, xxvii, 555; Bird Notes from the Campbellpur—Attock District, Western Punjab, xxvii, 794; The Marbled Duck (*Marmaronetta angustirostris*) in the Punjab, xxviii, 807; The Occurrence, Habits and Breeding of the Spotted Sandgrouse (*Pteroclorus senegalus*) in the Bahawalpur State, Punjab, xxviii, 807; Occurrence of the Desert Lark (*Alaemon desertorum*) in the Punjab, xxviii, 1132; A Note on the *Corvidæ* of the Punjab, xxix, 157; Nightjars of the Simla Hills, xxix, 286; Breeding of the Eastern Wood Pigeon (*Palumbus castotis*) in the Punjab Salt Range, xxix, 295; Note on the Appearance of the Stiff-tailed Duck (*Oxyura leucocephala*) in the Mianwali District, xxix, 563; The Common Flamingo (*Phœnicopterus antiquorum*) in the Punjab Salt Range, xxix, 840; The *Corvidæ* of the Punjab, xxix, 841; Migration of Eagles, xxix, 1054; The Distribution of the Himalayan Tree-Pie (*Dendrocitta formosæ himalayensis*, Blyth), xxx, 223; A Note on the Weavers and Finches of the Punjab, Part I, xxx, 177; Part II, xxx, 406; Occurrence of the Black-throated Diver (*Colymbus arcticus*) in India, xxviii, 1134; An Addition to the Indian List of Birds (*Emberiza miliaria*), xxv, 742; An Addition to the List of Indian Birds (*Luscinia sueica pallidogularis*), xxviii, 544; A Note on the Spotted-winged Grosbeak

(*Mycerobas melanoxanthus*), xxix, 150 ; The Spotted-wing Starling (*Psaroglossa spiloptera*), xxix, 290 ; Distribution of the Large Pin-tailed Sandgrouse (*Pteroclorus alchata*), xxix, 285 ; Flying on a Delhi Jheel, xxix, 1059 ; Distribution of the Himalayan Tree-Pie (*Dendrociitta formosæ himalayensis*, Blyth), xxx, 233 ; The Allied Grosbeak (*Perrisospiza affinis*, Blyth), xxx, 700.

NORTH-WEST FRONTIER PROVINCES—Occurrence of the European Great Bustard (*Otis tarda*) near Peshawar, xxv, 745 ; The Breeding of the Eastern Orphean Warbler (*Sylvia jerdoni*, Blyth) in the North-west Frontier Province, xxvii, 630 ; Notes on Duck in the Rawalpindi District, xxviii, 548.

BALUCHISTAN—White-headed Duck shot near Quetta, xxvii, 954.

SIND—Comb Duck (*Sarcidiornis melanonotus*) in Sind, xxv, 747 ; Egret Farming in Sind, xxvii, 944 ; xxviii, 748 ; Snipe shooting in Sind, xxix, 298 ; Close-barred Sandgrouse (*P. lichtensteini*) near Karachi, xxx, 226.

UNITED PROVINCES—Nidification of the Lesser or Common Whistling Teal (*Dendrocynna javanica*) and Bonelli's Eagle (*Hierætus fasciatus*), xxv, 499 ; The Malabar Pied Hornbill (*Anthraceroceros coronatus*) in Mirzapur, U. P., xxvi, 671 ; The Cuckoo (*Cuculus canorus*) in Mirzapur, U. P., xxvi, 671 ; The Great Indian Bustard (*Eupodotis edwardsi*) in Mirzapur District, U. P., xxvi, 673 ; The Blue-breasted Quail (*Excalfactoria chinensis*), Mirzapur, xxvi, 1044 ; The Red Turtle Dove (*Enopopelia. t. tranquebarica*), in Unao, U. P., xxvi, 1044 ; Large Flock of Comb Duck (*Sarcidiornis melanonotus*), in the Allahabad District of the U. P., xxvii, 638 ; Further Notes on Indian Nightjars, xxvii, 948 ; A Description of the Nests and Eggs of the Common Birds occurring in the Plains of the United Provinces, Part I, xxviii, 1069 ; Part II, xxix, 107 ; Part III, xxix, 334 ; Part IV, xxix, 757 ; Part V, xxix, 963 ; Part VI, xxx, 273 ; Birds' nesting in the Bhilling Valley, Tehri Garhwal, xxv, 494 ; Notes on the Nidification and Habits of Some Birds in British Garhwal, xxviii, 140 ; A Sporting Trip to the Pindari Glacier, Part I, xxx, 42 ; Part II, xxx, 380 ; Rough List and Notes of the Birds found breeding in the Gonda District, Oudh, xxviii, 751 ; Occurrence of the Nepal Kalij Pheasant at Mussoorie, xxx, 917.

BENGAL—The Indian Grackle or ' Hill Mynah ' (*Graculus intermedius*) resident in Calcutta, xxv, 297 ; Occurrence of the Ashy Wood-Pigeon (*Alsocomus pulchricollis*) in the Jalpaiguri District, xxv, 300 ; Black-headed Sibia (*Lioptila capistrata*) in the Jalpaiguri District, Bengal, xxv, 742 ; Occurrence of the White-Tailed Blue Robin (*Notodola leucura*) in the Buxa Duars District, Bengal, xxv, 742 ; The Burmese Peafowl (*Pavo muticus*) in the Chittagong Hill Tracts, Bengal, xxvi, 673 ; A Tentative List of the Vertebrates of the Jalpaiguri District, Bengal, Part I, xxvi, 819 ; Part II, xxvi, 988 ; Part III, xxvii, 151 ; Eastern Solitary Snipe Shot at Nabban Island, Chilka Lake, on the 16th December, 1921, xxviii, 1133 ; Notes on the Birds of the Sikkim Himalayas, Part I, xxix, 503 ; Part II, xxix, 723 ; Part III, xxix, 1007 ; Part IV, xxx, 54 ; Part V, xxx, 352 ; Part VI, xxx, 664 ; Part VII, xxx, 872 ; Late Stay of Snipe in 1922 in Bengal, xxix, 296 ; Occurrence of the Scaup Duck (*Fuligula marila*) in Northern India, xxx, 703.

ASSAM—Note on Kalij Pheasant, especially on a specimen from the Goalpara District, Assam, xxv, 595 ; The Spine-tailed swift (*C. indica*) and the Burmese Swift (*C. pacificus*) in Assam, xxvii, 631 ; The Sheldrake (*Tadorna cornuta*) in Manipur State, xxvi, 675 ; Notes on Small Game Shooting in the Khasia Hills, xxx, 441 ; Weights of Woodcock in Shillong, xxx, 919 ; Distribution of the Himalayan Impeyan Pheasant or Monal (*L. impeyanus*), xxx, 478.

BURMA—A List of Birds from the North Chin Hills, xxv, 72 ; Further Notes on Birds nesting in the Tons Valley, xxv, 493 ; Some Further Notes on Cuckoos in Maymyo, xxv, 742 ; Miscellaneous Notes on Some Birds in the Chin Hills, Burma, xxv, 750 ; Notes on Kalij Pheasants in the Chin Hills, xxvi, 289 ; An Addition to the Game Birds of Burma. The Long-billed Hill Partridge (*Rhizothera longirostris*, Temm.) in Tenasserim, xxvi, 291 ; Natural History Notes from Fao, xxvi, 292 ; The Black-breasted Kalij Pheasant (*Gennæus horsfieldi*), east of the Irrawaddy, xxvi, 848 ; Late Stay of Pintail Snipe (*Gallinago stenura*) in Burma, xxvi, 850 ; Migration of Snipe in Burma, xxvi, 850 ; Notes on Some Nests recently found in South Tenasserim, xxvi, 853 ; Some Observations on the Birds and Mammals of Iman Bum, xxvii, 754 ; Occurrence of the White-headed Black Bulbul (*Hypsipetes leucocephala*) within Indian Limits, xxix, 559 ; A Note on the Eastern Red-legged Falcon (*Erythropus amurensis*), xxix, 292 ; The Cotton Teal, xxx, 702.

CENTRAL PROVINCES—Birds of Pachmarhi, xxviii, 453 ; Occurrence of the Flamingo (*P. roseus*) in the Central Provinces, xxviii, 549 ; The Occurrence of the Blue-bearded Bee-eater (*Nyctiornis athertoni*) in the C. P., xxviii, 805 ; Note on Nightjars in the Central Provinces, xxviii, 806 ; A Curious Incident while Duck shooting, xxix, 563 ; Late Stay of Pintail (*Dafila acuta*) in the C. P., xxix, 839.

CENTRAL INDIA—Late Stay of Common Snipe (*Gallinago caelestis*) in Central India, xxvi, 849 ; Late Stay of Snipe in 1922 in Central India, xxix, 296 ; Notes on the Big Game and Duck of Dhar State, xxvi, 341.

BOMBAY PRESIDENCY—Occurrence of the Wood-snipe (*Gallinago nemoralis*) in Salsette, xxv, 149 ; Occurrence of the Lesser Florican or Likh (*S. aurita*) in the Mahabaleshwar Hills, xxvi, 289 ; Occurrence of Indian Red-breasted Flycatcher (*Siphia hyperythra*) in the Deccan, xxvi, 667 ; Notes on the Occurrence of the Lesser Florican or Likh (*Sypheotis aurita*) in Bombay, xxvi, 674 ; Occurrence of the Common Sheldrake (*Tadorna cornuta*) and the Marbled Duck (*Marmaronetta angustirostris*) in Kathiawar, xxvi, 674 ; Extension of the Range of the Green Imperial Pigeon (*Carpophaga ænea ænea*) in Western India, xxvi, 846 ; Appearance of the Mute Swan (*Cygnus olor*) near Poona, xxix, 287 ; List of Small Game Shot in Mhow during 1921–22, xxix, 293 ; Late and Early Snipe in the Decan, Poona District, xxix, 837 ; Southern Range of the Mallard (*Anas boschas*), xxix, 1052 ; Shikar near and around Poona, xxviii, 1075 ; The Adjutant Bird and other matters, xxviii, 287 ; Snipe on Dry Stony Ground, xxx, 225.

MADRAS PRESIDENCY—The Cotton Teal in Malabar, xxvi, 674 ; Common Pochard (*N. ferrina*) at Bangalore, xxvii, 172 ; Rough Notes on the Avifauna of the Nelliampathy Hills, xxvii, 939 ; Occurrence of the Pied Ground Thrush (*Geocichla wardi*) on the Nelliampathy Hills, xxvii, 944 ; The Avifauna of the Nelliampathy Hills, xxviii, 279 ; Occurrence of the

Malay Bittern (*Gorsachius melanolophus*) at Ootacamaud, S. India, xxvii, 547 ; Occurrence on the Nilgiris of a Partial Albino of the Southern Indian Scimitar Babbler (*Pomatorhinus horsfieldi travancoriensis*) (Hannington), B. I. No. 120, xxviii, 1135 ; Further Notes on the Avifauna of the Nelliampathy Hills, xxix, 294 ; Plumage of Adult Mallard (*Anas platyrhynchos*) and Notes on Woodcock and Woodsnipe in the Nilgiris, xxix, 564 ; On the Birds of the Nelliampathy Hills, xxix, 564 ; Woodcock in the Nilgiris, xxix, 841 ; The Southern Range of the Great Indian Bustard (*Eupodotis edwardsi*), xxx, 225 ; Occurrence of *Pelecanus roseus* in the Vizagapatam District, xxx, 483 ; Identity of the ' Devil Bird ' of South India, xxx, 484 ; Fresh Light on the Identity of the ' Devil Bird ', xxx, 914 ; Extension of the Range of the Bronze-winged Dove, xxvi, 671 ; A Day's shooting on the Nilgiris near Ootacamund, xxviii, 434 ; A Note on the Early Arrival of Flamingo in India, xxx, 226.

RAJPUTANA—Late Stay of Teal (*Nettion crecca*), xxv, 301 ; The Occurrence of the Mallard in Rajputana, xxix, 277.

NICOBARS—A Survey Season in the Nicobar Islands, xxviii, 970.

BEHAR—Further Occurrence of the Rose-coloured Starling (*Pastor roseus*) and the Flamingo (*Phaenicopterus roseus*) in the Darbhanga District, Behar, xxvi, 853 ; Occurrence of the Indian Pitta (*Pitta brachyura*) in the Darbhanga District, Behar, xxvii, 402 ; Snaring Quail in North Behar, xxvii, 947 ; The Fauna of the Darbhanga District, North Behar, xxix, 136 ; Further Notes on Snaring Quail in North Behar, xxix, 565 ; Arrival of Duck and Teal in the Darbhanga District, Behar, xxv, 499.

#### BIRDS (NIDIFICATION.)

CORVIDÆ—Crows' Nests and Electric Cables, xxx, 913.

PARIDÆ—Double Nest of Kashmir Great Tit (*Parus major kaschmiriensis*), xxix, 837.

TIMALIIDÆ.—A Few Notes on the Nests and Eggs of some of the Burmese Scimitar Babbler, xxv, 748 ; Note on the Nesting Habits of the Spotted Babbler (*Pellorneum ruficeps*), xxix, 292 ; Nidification of the Western Spotted Babbler (*P. ruficeps*), xxix, 1053.

MYCNOTIDÆ—The Breeding of the White-eared Bulbul (*Molpastes leucotis*), xxv, 297 ; Nidification of the Southern Red-whiskered Bulbul (*Otocompsa emeria fuscicaudata*), xxviii, 545 ; Curious Site for Nest of the Bengal Red-vented Bulbul (*Molpastes haemorrhous bengalensis*), xxviii, 1135 ; The Incubation Period of Bulbuls' Eggs, xxix, 1056 ; Nesting of Bingham's White-headed Bulbul (*Cerasophila binghami*), xxx, 223 ; The White-cheeked Bulbul (*Molpastes leucogenys*), xxvi, 286.

CERTHIDÆ—Notes on the Nesting of the Himalayan Tree-creeper (*Certhia himalayana*), xxviii, 1138 ; Nidification of the Himalayan Tree-creeper (*Certhia himalayana*), xxix, 557.

TURDIDÆ—Nesting Habits of the Brown Rockchat (*Cercomela fusca*), xxvi, 667 ; Maternal Instinct of the Pied Bush-chat (*Pratincola caprata*), xxvi, 843 ; Nesting Habits of the Brown Rock-chat (*Cercomela fusca*), xxvi, 843 ; Nidification of the Ceylon Thrush (*O. imbricata*, Layard), xxviii, 546 ; Nidification of the Ceylon Thrush (*O. imbricata*), xxviii, 1130 ; Breeding of the Eastern White-spotted Bluethroat (*C. c. abbotti*), xxx, 477 ; Nidification of the Ceylon Arrenga (*A. blythi*), xxviii, 1131,

- MUSCICAPIDÆ—On the Oology of the Niltavas, xxvii, 405 ; The White-spotted Fantail Flycatcher (*Rhipidura pectoralis*), xxviii, 282.
- SYLVIIDÆ—Note on the Eggs of Indian Wren-Warbler (*Prinia inornata*), xxvi, 1043 ; The Breeding of the Eastern Orphean Warbler (*Sylvia jerdoni*, Blyth), in the N. W. Frontier Province, xxvii, 630.
- FRINGILLIDÆ.—Nesting of the Yellow-throated Sparrow at Kalaw, Shan States (*Gymnoris xanthosterna xanthosterna*), xxx, 477.
- HIRUNDINIDÆ—Notes on the Nidification of Hodgson's Striated Swallow (*Hirundo nepalensis*), xxvii, 631.
- MOTACILLIDÆ—On the Breeding of Certain Wagtails, xxix, 281 ; On the Breeding of the Indian Tree-pipit (*Anthus hodgsoni*) in Kulu, xxx, 701.
- NECTARINIIDÆ—Nidification of the Small Streaked Spider Hunter (*Arachnothera aurata*), xxvi, 669 ; Nesting Site chosen by the Purple Honey Sucker (*Arachnechthra asiatica*), xxviii, 1136 ; Nest of Mrs. Gould's Yellow-backed Sunbird (*Æthopyga gouldiæ*), xxix, 1052 ; Nesting of Walden's Yellow-backed Sunbird (*Æthopyga sanguinipectus*), xxix, 1053.
- PITTIDÆ—The Breeding of the Indian Pitta, xxviii, 284 ; Breeding of the Indian Pitta (*Pitta brachyura*) and the Streaked Wren Warbler (*Prinia lepida*), xxviii, 1135.
- PICIDÆ—The Nidification of the Malabar Great Black Woodpecker (*Thriponax hodgsoni*), xxix, 561.
- ALCEDINIDÆ—Nesting Habits of the Indian White Breasted Kingfisher (*Halcyon smyrnensis fusca*), xxx, 477 ; Woodpecker occupying Nest Box, xxviii, 1137.
- BUCEROTIDÆ—Notes on the Nidification of the Common Grey Hornbill (*Lophoceros birostris*), xxv, 503.
- UPUPIDÆ—Curious Nesting Site of the Indian Hoopoe (*Upupa indica*), xxvii, 171.
- MICROPODIDÆ—The Crested Swift (*Micropteryx coronata*), xxviii, 283.
- FALCONIDÆ—Note on the Indian Long-billed Vulture (*Gyps indicus*), xxv, 287 ; Nidification of the Himalayan Long-billed Vulture (*Gyps tenuirostris*), xxvii, 951 ; Nidification of the Black Vulture or Indian King Vulture (*Otogyps calvus*), xxviii, 284 ; Nidification of the Black Vulture or Indian King Vulture (*Ologyps calvus*), xxix, 295 ; White Scavenger Vulture (*N. ginginianus*) nesting on the Ground, xxx, 224 ; Nidification of Bonelli's Eagle, xxv, 499.
- COLUMBIDÆ—Breeding of the Eastern Wood Pigeon (*Palumbus casiotis*) in the Punjab Salt Range, xxix, 295.
- PTEROCLIDÆ—The Occurrence, Habits and Breeding of the Spotted Sandgrouse (*Pteroclorus senegallus*) in Bahawalpur State, Punjab, xxviii, 807 ; Breeding of the Painted Sandgrouse in the Punjab Salt Range, xxx, 917 ; Habits of the Painted Sandgrouse (*Pterocles fasciatus*) xxvi, 672.
- PHASIANIDÆ—The Breeding Habits of Mrs. Hume's Pheasant, xxvi, 289 ; Nidification of Stone's Pheasant (*Phasianus elegans*), A Correction, xxvi, 673 ; Note on the Breeding of the Hill Partridge (*Arboricola torquola*) near Simla, xxvi, 849 ; Abnormal Eggs of the Monal (*Lophophorus*

*refulgens*), xxvii, 953 ; Breeding of the Khyah or Marsh Partridge (*Francolinus gularis*) in Captivity in Behar, xxviii, 287 ; The Nidification of the Common or Grey Quail (*Coturnix coturnix coturnix*), xxx, 226.

HELIORNITHIDÆ—The Nidification of the Masked Finfoot (*Heliopais personata*), xxvii, 634.

OTIDIDÆ—Description of Chick of the Bengal Florican (*Sypheotis bengalensis*), xxviii, 1133.

JACANIDÆ—Eggs of the Pheasant-tailed Jacana (*H. chirugus*), xxvii, 954.

CHARADRIIDÆ—On the Breeding of the Black-winged Stilt (*Himantopus candidus*), xxix, 838.

LARIDÆ—The Breeding of the Gull-billed Tern (*Sterna anglica*), xxv, 300.

CICCOINIDÆ—Breeding of the Black-necked Stork (*Xenorhynchus asiaticus*), xxvii, 171 ; Note on the Breeding Season of the Painted Stork (*Pseudotantalus leucocephalus*), xxix, 561.

ARDEIDÆ—The Nesting of the Little Green Heron in the District of the 22-Pergannas, xxx, 918.

ANATIDÆ—Nidification of the Lesser or Common Whistling Teal (*Dendrocygna javanica*), xxv, 499 ; Nesting of the Nukta or Comb Duck (*S. melanonotus*), xxvii, 637 ; The Cotton Teal, xxx, 702.

#### BIRDS (NESTING) GENERAL—

Further Notes on Birds nesting in the Tons Valley, xxv, 493 ; Birds nesting in the Bhilung Valley, Tehri Garhwal, xxv, 494 ; Curious Position of a Dove's Nest, xxv, 507 ; Different Birds nesting in Company, xxvi, 853 ; Birds of Different Species nesting in Company, xxvi, 1044 ; Birds of Different Species nesting in Company, xxvii, 171 ; Some Curious Nesting Places, xxviii, 285 ; Destruction of Birds' Nests, xxviii, 286 ; Nest Boxes for Birds, xxviii, 460 ; Destruction of Bird's Nests, xxviii, 798 ; Birds nesting with a Camera in India, Part I, xxix, 947 ; Part II, xxx, 97 ; Part III, xxx, 306 ; Part IV, xxx, 589 ; Part V, xxx, 793 ; Wire Nests, xxix, 1055 ; Rough List and Notes on the Birds found breeding in the Gonda District, Oudh, xxviii, 753 ; Notes on the Nidification of Certain Birds in Ladak, xxvii, 141.

#### BIRDS (HABITS)—

Large Pintail Sandgrouse (*P. a. caudacutus*) settling on Water, xxv, 149 ; Notes on the Great Brown Vulture (*Vultur monachus*) in Captivity, xxv, 298 ; Some Notes on the Burmese Peafowl (*Pavo muticus*) in Captivity, xxvi, 500 ; Notes on the Habits of the Mallard (*Anas boschas*), xxvi, 291 ; Indian Grey Shrike (*Lanius lahtora*) attacking Wounded Sandgrouse, xxvi, 667 ; Note on the Large Brown Thrush (*Zoothera monticola*), xxvi, 668 ; Habits of the Painted Sandgrouse (*Pterocles fasciatus*), xxvi, 672 ; Feeding Habits of the Little Egret (*Herodias garzetta*), xxvi, 852 ; Strange Behaviour of a Wild Bird, xxvi, 1043 ; Hovering Habit of the Spotted Owlet (*Athene brahma*), xxvi, 1045 ; Egret and Lizard, xxvii, 172 ; The Great Indian Hornbill (*Dichoceros bicornis*), xxvii, 174 ; The Desert Duck (*Alcedo desertorum*), xxvii, 400 ; A Note on the Habits of the Pariah Kite (*Milvus govinda*) and the Adjutant Stork (*Leptoptilus dubius*), xxvii, 633 ; Notes on the Habits

of *Anthracoceros albirostris*, the Indo-Burmese Pied Hornbill, in Confinement, xxvii, 950; The Lämmergyer (*Gypaëtus barbatus*) and the Golden Eagle (*Aquila chrysaëtus*), xxvii, 952; Roosting Habits of the Common Babbler (*Argya caudata*), xxxviii, 280; Behaviour of the White-cheeked Bulbul (*Molpastes leucogenys*) when its young is in danger and the ? parental instinct of love for the offspring displayed by the Dark Grey Bush Chat (*Oreicola ferrea*), xxviii, 280; Habits of the Southern Scimitar Babbler, xxviii, 545; Woodpeckers 'Roosting' xxviii, 546; Predaceous Habit of the Common King Crow, xxviii, 546; On the Homing Flight of the Common House Crow (*Corvus splendens*), xxviii, 804; Notes on the Habits of a Young Hornbill, xxix, 280; On the Habits of the White-headed Duck (*Oxyura leucocephala*), xxix, 284; The Roosting flight of Crows, xxix, 289; The Homing Flight of the Common House Crow (*Corvus splendens*), xxix, 290; Drongo and Cicada, xxix, 839; Birds attacking a Snake, xxix, 840; Predatory Habits of the Magpie, xxx, 914; Note on the Nidification and Habits of some Birds in British Garhwal, xxviii, 140; The Occurrence, Habits and Breeding of the Spotted Sandgrouse (*Pteroclorus senegallus*) in the Bahawalpur State, Punjab, xxviii, 807; The Common Indian Bee-eater, xxviii, 1130; The Shikra (*Astur badius*), xxix, 560; The Burmese Barred-Back Pheasant (*Phasianus himie burmanicus*), xxix, 562; Hawks and Swallows, 915; The Call of Franklin's Nightjar (*Caprimulgus monticola*), xxviii, 284; The White-throated Ground Thrush (*Geocichla cyanotus*) as a Mimic, xxviii, 805; Note on a Fight between the Indian Screech Owl and a Cobra, xxviii, 552; Is the Dhayal (*Copsychus saularis*) a Mimic, xxviii, 1133.

#### BIRDS (FOOD)—

Food of Bulbuls, xxv, 503; Food of the Burmese Roller (*C. affinis*) and the Ashy Drongo (*D. nigrescens*), xxvii, 955; The Food of the Shikra (*Astur badius*), xxviii, 807.

#### BIRDS (MIGRATION)—

Flight of Migrating Birds, xxix, 146; Notes on the Migration of Duck and Teal, xxix, 279; A Note on the Migration of the Eastern Grey Wagtail (*Motacilla cinerea melanope*), xxix, 287; Migration of Eagles, xxix, 1054; Eversman's Redstart (*Phænicurus erythronotus*, Eversm.) xxvii, 403; A Note on the Eastern Red-legged Falcon (*Erythropus amurensis*), xxix, 292.

#### BIRDS (VARIATION AND PLUMAGE)—

Abnormal Varieties of the Indian Redstart (*R. rufiventris*) and the Common House Crow (*C. splendens*), xxvi, 289. The Colour of the Eye of the Female White-eyed Pochard (*Nyroca africana*), xxvi, 290; Variety of the Common House Crow (*C. splendens*) at Jhang, Punjab, xxvi, 843; An Albino Swallow, xxvi, 844; Abnormal Variety of the Green Bee-eater (*Merops viridis*), xxvi, 844; Abnormal Coloured Egg of the Pheasant-tailed Jacana (*Hydrophasianus chirurgus*), xxvii, 403; Melanism in the Red-vented Bulbul (*Molpastes* sp.), xxvii, 629; An Albinoid *Otocompsa emeria*, xxviii, 281; An Albino Shoveller (*Spatula clypeata*), xxix, 285; The Great Indian Hornbill (*D. bicornis*), xxix, 294; Plumage Display by the Sirkeer Cuckoo,

xxix, 299; A Note on the White-bellied Sea Eagle (*Haliaeetus leucogaster*), xxix, 1059; An Albino Hoopoe, xxx, 916; The Plumage of the Purple Honeysucker (*Arachnechthra asiatica*), xxv, 286.

#### BIRDS (STRUCTURAL)—

The Height at which Birds are able to fly, xxv, 302; The Span of Large Birds, xxv, 302; xxv, 752; The Weights of Pintail and Fantail Snipe, xxv, 306, The Mechanics of the Soaring Bird, xxx, 479; Weights of Woodcock in Shillong, xxx, 919; Records with Snipe, xxx, 920.

#### BIRDS (ECONOMICS)—

Egret farming in India, xxviii, 751; Egret farming in Sind, xxvii, 944; xxviii, 748.

#### BIRDS (PROTECTION)—Cruelty to Wildfowl, xxix, 296.

BIRDS (SHOOTING) Notes on the Big Game and Duck of Dhar State, xxvi, 841; Small Game Shooting in Kashmir and the Adjacent Hill Provinces, xxix, 653; A Sporting Trip to the Pindari Glacier, Part I, xxx, 42; Part II, xxx, 380; A Day's Shooting on the Nilgiris near Ootacamund, xxviii, 434; The Barton Shooting Seat, xxv, 515.

#### BIRDS (SYSTEMATIC)—

The Game Birds of India, Burma and Ceylon—

Part XXI—The Common Jungle Fowl, Burmese Jungle Fowl, Grey Jungle Fowl and Ceylon Jungle Fowl (plate), xxv, 1.

Part XXII—The White-crested Kalij, Nepal Kalij, Black-backed Kalij Black-breasted Kalij, William's Kalij Pheasants (plate), xxv, 161.

Part XXIII—Oates' Silver Pheasant, Grant's Silver Pheasant, the Chinese Silver Pheasant, Yunnan Silver Pheasant, Ruby Mines Silver Pheasant, Mrs. Hume's Pheasant and Stone's Pheasant (plate), xxv, 325.

Part XXIV—The Koklas or Pukras Pheasant, Kashmir Koklas, Nepal Koklas, Chesnut-mantled Koklas, Meyer's Koklas, the Yellow-necked Koklas and Amherst Pheasant (plate), xxv, 521.

Part XXV—The Cheer Pheasant, The Fire-back, Siam Fire-back (plate), xxvi, 1.

Part XXVI—The Monal Pheasant, the Impeyan Pheasant or Monal, Sclater's Monal (*Lophophorus l'huysii*) (plate), xxvi, 319.

Part XXVII—The Crimson-horned Pheasant, xxvi, 705.

Part XXVIII—The Grey-bellied Horned Pheasant, the Western Tragopan, the Tibetan Tragopan, Temminck's Tragopan, Cabot's Tragopan (plate), xxvi, 885.

Part XXIX—Ceylon Spur-Fowl, The Red Spur-Fowl, Stuart's Red Spur-Fowl, the Aravalli Spur-fowl, The Painted Spur-Fowl, the Mountain Quail (plate of *Galloperdix bicalcarata*), xxvii, 1.

Part XXX—The Assam Black Partridge, the Northern Indian Black Partridge, the South Persian Black Partridge, the Southern Painted, Partridge (plate of *Francolinus f. melanonotus*), xxvii, 193; The

Arrakan Red-throated Hill Partridge, Tickell's Red-throated Hill Partridge, the Red-breasted Hill Partridge, the White-cheeked Hill Partridge, the Brown-breasted Hill Partridge, the Green-legged Hill Partridge, the Ferruginous Wood Partridge, the Long-billed Wood Partridge (plate), xxviii, 1.

Part XXXI—The Northern Painted Partridge, the Eastern or Chinese Francolin, The Kyah or Marsh Partridge, xxvii, 417; The Indian Chukor, Hume's Chukor (plate), xxviii, 305.

Part XXXII—The Rufous-necked Hill Partridge, the Common Hill Partridge, Ogilvie Grant's Hill Partridge, the Simla Hill Partridge, Blyth's or Rufous-throated Hill Partridge, (plate of *Arboricola r. rufogularis*), xxvii, 651; The Tibetan Partridge, the Kansu Partridge (Plate of *Perdix hodgsoni hodgsoni*), xxvii, 571.

Part XXXIII—The See-see (plate), xxviii, 823.

Part XXXIV—The Indian Blue-breasted Quail (plate), xxix, 1.

Part XXXV—The Jungle Bush Quail, the Rock Bush Quail (Plate), xxix, 309.

Part XXXVI—The Black-breasted or Rain Quail, The Common or Grey Quail; The Japanese Grey Quail (plate) xxix, 577.

Part XXXVII—The Painted Bush Quail, Primrose's Bush Quail, The Manipur Bush Quail, Blewitt's Bush Quail (plate), xxix, 849.

Part XXXVIII—The Tibetan Snow Cock (*Tetraogallus t. tibetanus*) (plate), xxx, 1.

Part XXXIX—The Snow Partridge (*Lerwa lerwa*) (Plate), xxx, 236.

#### BIRDS OF THE INDIAN EMPIRE—

Part I—*Corvidæ*, *Paridæ*, *Paradoxornithidæ*, *Turdoididæ*, xxvii, 228.

Part II—*Turdoididæ*, *Sibienæ*, *Liothrichinæ*, *Sittidæ*, *Dicruridæ*, *Troglodytidæ*, *Regulidæ*, *Sylviidæ*, xxvii, 488.

Part III—*Laniidæ*, *Oriolidæ*, *Eulabelidæ*, *Sturnidæ*, *Muscicapidæ*, *Turdidæ*, *Phenicurinæ*, *Brachypteryginæ*, *Turdinæ*, *Cinclinæ*, *Prunellidæ*, *Plocienæ*, *Viduinæ*, *Fringillidæ*, *Coccothraustinæ*, *Fringillinæ*, *Ampellidæ*, *Hirundinidæ*, *Motacillidæ*, *Alaudidæ*, xxvii, 692.

Part IV—*Zosteropidæ*, *Nectariniidæ*, *Chalocopariidæ*, *Pittidæ*, *Eurylaimidæ*, *Picidæ*, *Indicatoridæ*, *Capitonidæ*, *Coraciidæ*, xxviii, 85.

Part V—*Meropidæ*, *Alcedinidæ*, *Bucerotidæ*, *Upupidæ*, *Micropodidæ*, *Caprimulgidæ*, *Podargidæ*, *Trogonidæ*, *Cuculidæ*, *Psittacidæ*, xxviii, 313.

Part VI—*Strigidæ*, *Pandionidæ*, *Gypidæ*, *Falconidæ*, xxviii, 576.

Part VII—*Columbidæ*, *Pteroclidæ*, *Phasianidæ*, *Megapodidæ*, *Turnicidæ*, *Rallidæ*, *Megalornithidæ*, *Otididæ*, *Burhinidæ*, *Charadriidæ*, *Laridæ*, *Stercorariidæ*, xxviii, 830.

Part VIII—*Pelecaniidæ*, *Fregatidæ*, *Phalacrocoracidæ*, *Sulidæ*, *Phaethonidæ*, *Procellariidæ*, *Ibididæ*, *Plataleidæ*, *Ciconiidæ*, *Ardeidæ*, *Phaenicopteridæ*, *Anatidæ*, xxix, 9.

#### THE RAPTORES OF THE PUNJAB—xxv, 231.

THE BIRDS OF PREY OF THE PUNJAB—

Part I—Introduction, Pandionidæ, Vulturidæ, Falconidæ, xxvi, 247.

Part II—*Falconidæ (contd.)*, xxvi, 629.

Part III—*Falconidæ (contd.)*, xxvi, 826.

Part IV—*Falconidæ (contd.)*, xxvi, 1000.

Part V—*Falconidæ (contd.)*, xxvii, 128.

Part VI—*Falconidæ (contd.)*, xxvii, 280.

Part VII—A key to the Birds of Prey on the Wing, xxvii, 606.

BIRDS (GENERAL)—

On Asiatic Starlings, xxvi, 380; Supplementary Notes on Some Indian Birds, xxvi, 424; Sub-species and the Field Naturalist, xxvi, 518; Extracts from 'A Monograph on the Pheasants' by William Beebe, xxvi, 847; The Trinomial System as applied to Indian Birds, xxix, 560; Note on a Supposed New Race of *Otocorys alpinus*, the Horned Lark, xxix, 560; An Addition to the Indian List of Birds (*Emberiza miliaria*), xxv, 742; *Luscinia suecica pallidogularis*, xxviii, 544; Dr. Ticehurst's Appeal, xxviii, 1107; Folklore of Birds and Beasts in India, xxviii, 562; A Brief Reply to Some Criticisms on the Second Edition of the Avifauna of British India, xxx, 207; Accidents to Vultures, xxvi, 1045; Falconry—The Catching of Hawks and Falcons, xxvii, 829; Shakespeare on the Noble Art of Hawking, xxviii, 161; Manipuri Names of Certain Birds, xxviii, 288; Some Comments and Corrections of Previous Articles in the Journal, xxviii, 1117; Folklore of Birds and Beasts of India, xxviii, 1149.

BLACK BUCK—See MAMMALS.

BLANDY, CAPT. R.—The Breeding Habits of Mrs. Hume's Pheasant, xxvi, 289.

BLATTER, REV. E.; REV. FR. DRECKMANN, S.J., Obituary, xxv, 293; The Palms of British India and Ceylon, Indigenous and Introduced, Parts XVIII-XIX; See BOTANY, systematic; The Edible Date Palm in Bombay, xxv, 306.

BLATTER AND HALLBERG, PROF. F.—A Revision of the Indian Species of *Rotala* and *Ammania*, Part I, xxv, 701; Part II, xxvi, 210; New Indian Scrophulariaceæ and Some Notes on the Same Order, xxv, 416; Contributions towards the Flora of Baluchistan and Makran, from Material supplied by Capt. J. E. B. Hotson, I.A.R.O., xxv, 723; The Flora of the Indian Desert (Jodhpur and Jaisalmer), Part I, xxvi, 210; Part II, xxvi, 526; Part III, xxvi, 811; Part IV, xxvi, 968; Part V, xxvii, 40; Part VI, xxvii, 270; Part VII, xxvii, 506.

BOLSTER, R. C., I.C.S.—Breeding of the Indian Pitta, xxviii, 284; Destruction of Bird's Nests, xxviii, 286; The Occurrence, Habits and Breeding of the Spotted Sandgrouse (*Pteroclorus senegalus*) in the Bahawalpur State, Punjab, xxviii, 807; Occurrence of the Desert Lark (*Alaemon desertorum*) in Punjab, xxviii, 1132; On the Habits of the White-headed Duck (*Oxyura leucocephala*), xxix, 284; An Albino Shoveller (*Spatula*

*clypeata*), xxix, 285 ; Distribution of the Large Pintailed Sandgrouse (*Pteroclorus alchata*), xxix, 285 ; Note on the Breeding Season of the Painted Stork (*Pseudotantalus leucocephalus*), xxix, 561.

BOMBAY—See BIRDS, BOTANY, FISH

# BOTANY (GEOGRAPHY)—

Preliminary Notes on a Recent Botanical Tour to the High Wavy Mountain (S. India), xxv, 290 ; Herbaceous Monsoon Flora at Castle Rock and a new species of Balsam, xxv, 482 ; The Cyperaceæ of the Bombay Presidency, Part I, xxv, 682 ; Part II, xxvi, 192 ; Contributions towards the Flora of Persian Baluchistan and Makran from material supplied by Capt. J. E. B. Hotson, I.A.R.O., xxv, 723 ; The Flora of the Indian Desert, Part I, xxvi, 218 ; Part II, xxvi, 525 ; Part III, xxvi, 811 ; Part IV, xxvi, 968 ; Part V, xxvii, 40 ; Part VI, xxvii, 270 ; Part VII, xxvii, 506 ; A Few Additions to the List of Mussoorie Plants by James Marten in vol. xix, p. 475, xxvi, 695 ; Liverworts of the Western Himalayas and the Punjab, with Notes on known species and description of the New species, xxv, 279 ; Notes on Charophytes from Gonda, U.P., xxx, 589.

# BOTANY—

*Notes on individual species*—The Cone of *Selaginella pallidissima*, Spr. (plate), xxv, 284 ; Note on the Colour of the Flowers in *Dysophylla stellata*, Bth., xxv, 312 ; Phenomena of Interchangeability of Vegetative and Fruit Structures in *Opuntia elatior*, Mill. (plates), xxv, 513 ; The Sport from *Opuntia elatior*, Mill. (plate), xxv, 514 ; Notes on a new Undescribed Species of *Cynodon* (plate), xxvi, 304 ; A Variety of *Butea frondosa*, xxvi, 305 ; The Edible Date Palm in Bombay, xxvi, 306 ; *Eleocharis congesta*, Don., in Bombay Presidency, xxvi, 312 ; Reduction of *Euphorbia rothiana*, xxvi, 599 ; A Short Note on the Atrophic Abortion of the Inflorescence of the Onion (*Allium cepa*, L.), xxvii, 179. A Mango Tree (*M. indica*), flowering in August, xxvii, 645 ; Note on the Cotton Tree (*Bombax malabaricum*), xxvii, 965 ; A Short Note on Instances of Syncarpy in *Mangifera indica*, xxviii, 560 ; Cultivation of the Edible Date Palm (*Phoenix dactylifera*) in South India (plate), xxv, 763 ; On the Antiquity and the Therapeutic uses of the Indian Spikenard, xxx, 777.

# BOTANY (SYSTEMATIC).—PHANEROGAMIC PLANTS.

## PALMS—

### THE PALMS OF BRITISH INDIA AND CEYLON, INDIGENOUS AND INTRODUCED.

Part XVIII—Raphia, Wine Palm (*Raphia, vinifera*), Sago Palm (*Metroxylon sagus*), Rumph's Sago Palm (*Metroxylon rumphis*), (plates xcvi-xcix and 3 text-figures), xxvi, 52.

Part XIX—Zalacca, Plectocomia, Calamus (Canes) (plates c-ciii and 8 text-figures), xxv, 207.

Part XX—Calamus (Canes), Plectocomiopsis, Dæmonorops (plates civ-cvi and 7 text-figures), xxv, 386.

SCROPHULARIACEÆ—New Indian Scrophulariaceæ and Some Notes on the Same Order, xxv, 416.

LYTHRACEÆ—A Revision of the Indian Species of *Rotala* and *Ammania*, Part I, xxv, 701 ; Part II, xxvi, 210.

CYPERACEÆ—The Cyperaceæ of the Bombay Presidency, Part I, xxv, 682 ; Part II, xxvi, 192.

GRAMINEÆ—Note on a New Undescribed Species of *Cynodon* (plate), xxvi, 304.

# BOTANY (SYSTEMATIC) (CRYPTOGAMIC PLANTS)—

LIVERWORTS—Liverworts of the Western Himalayas and the Punjab, with notes on known species and descriptions of the new species, xxv, 279.

FUNGI—A New Species of *Phytophthora* Parasitic on the Para Rubber Tree, xxv, 760.

CHAROPHYTES—Notes on Charophytes from Gonda, U.P., xxx, 589.

BOTANY (GENERAL)—An Interesting case of distribution, xxv, 313 ; Fall of Seed in Rain Storm, xxv, 313 ; Fall of Seed in a Rain Storm, xxv, 764 ; On the Identity of *Blastospora butleri*, Syd. (plate), xxvi, 696 ; An Anomaly in Floral Biology, xxvi, 1049 ; A Case of Plant Surgery, xxviii, 815.

BOULENGER, G. A., L.L.D., D.Sc., F.R.S.—Description of a New Lizard of the Genus *Acanthodactylus* from Mesopotamia, xxv, 373 ; Description of a New Snake of the Genus *Contia* B. & G., from Persia, xxvi, 1024 ; Description of a New Snake of the Genus *Zamenis* from Persia, xxvii, 251 ; Description of a New Land Tortoise from Northern Persia, xxvii, 251 ; A List of Snakes collected by the Members of the Mesopotamian Expeditionary Force 1915-1919, xxvii, 351 ; A List of Lizards from Mesopotamia collected by the Members of the Mesopotamian Expeditionary Force, 1915-1919, xxvii, 347.

BOYD, MAJOR J. E. M.—Strange Behaviour of a Wild Bird, xxvi, 1043 ; Abnormal Eggs of the Monal (*Lophophorus refulgens*), xxvii, 953 ; Notes on a Fight between an Indian Screech Owl and a Cobra, xxviii, 552.

BRANDER, A. A. DUNBAR, I.F.S.—The Tiger and the Train, xxvi, 658 ; The Tiger making the Sambhar Call, xxviii, 793 ; Scorpions committing Suicide, xxviii, 559.

BREITHAUP, A. G. H.—Ants attacking Bees, xxvi, 878.

BROLEMANN, H. W.—Myriopods from Mesopotamia and Persia (plates), xxviii, 165.

BROOKING, MAJOR-GENERAL H. T.—List of Birds observed in the Euphrates Valley, xxvi, 677.

BROOK-FOX, E.—Fall of Seed in Rain Storm, xxv, 313.

BROWNE, E. G.—Female Black Buck (*A. cervicapra*) with Horns, xxvii, 169.

BRYANT, J. F., M.A., F.G.S., I.C.S.—Trout Culture on the Nilgiris (map and plates), xxvii, 898.

BUDDEN, J.—Black Buck *vs.* Motor, xxvii, 939.

BULBULS—*See* BIRDS, FOOD.

- BURTON, BRIG.-GENERAL. H. G.—Panthers, xxvi, 266 ; Lengths of Tigers and Panther, xxvii, 163 ; Scent, xxvii, 164 ; Tigers in Trees, xxvii, 164, 383 ; Man-eating Tigers on Saugor Island in the Eighteenth Century, xxvii, 385 ; The Hunting Leopard (*Cynelurus jubatus*), xxvii, 398 ; The Adjutant Bird and other Matters, xxviii, 287.
- BURTON, MAJOR A. R.—Close-barred Sandgrouse at Muscat, xxv, 751.
- BURTON, R. G.—The Game Animals of India, xxviii, 1120.
- BURTON, COL. R. W.—Buffalo in the Nicobar Islands, xxv, 491 ; Notes from the Oriental Sporting Magazine, New Series, 1869-1879, xxv, 491, 740 ; Habits of the Green Turtle (*Chelone mydas*), xxv, 508 ; Notes from the Oriental Sporting Magazine, New Series 1869-1879, xxvi, 309 ; June 1828, to June 1833, xxvi, 1047 ; Abnormal Ibex Head (block), xxviii, 544 ; The Tiger making the ' Sambhar Call ' xxviii, 793.
- BUXA DUARS—See BIRDS.
- BUXTON, P.A., M.A., M.B.O.U.—The Name of a Mesopotamian Earwig, xxvii, 407 ; Notes on Birds from Northern and Western Persia, xxvii, 844 ; Earwigs from Mesopotamia and North-western Persia, xxvii, 963.
- BUXTON, P.A., M.A., M.B.O.U. AND TICEHURST, CLAUD B., M.A. M.B.O.U., AND MAJOR R. E. CHEESMAN, M.B.O.U.—The Birds of Mesopotamia, Parts I-IV, xxviii, 210, 381, 650, 937.
- BUXTON, P.A., M.B.O.U. AND WATKIN H. T. G.—Moths of Mesopotamia and North-Western Persia, Part II, xxviii, 184.
- CAINS, J. F., S.J.—The Habits of the Green Whip Snake (*Dryophis mycterizans*), xxvi, 862.
- CALCUTTA—See BIRDS.
- CAMERON, T.H., D.S.P.—Notes on Turtles, xxix, 299.
- CAMPBELL, J.M. D.Sc.—A Python's Meal (plate), xxix, 566.
- CAMPBELPUR—See BIRDS.
- CAPPER, LT.-COL. A. STUART—Measurements of Tigers and Panthers, xxvii, 936 ; Hyænas in Mesopotamia, xxvii, 936 ; A Large Bear Shot near Guna (*U. labiatus*), xxvii, 937.
- CARACAL—See MAMMALS.
- CASTLE ROCK—See BOTANY.
- CENTRAL PROVINCES—See SNAKES, BIRDS.
- CEYLON—(See TORTOISE, MAMMALS).
- CHAMIER, J. A., C.M.G., D.S.O., O.B.E.—The Mechanics of the Soaring Bird, xxx, 479.
- CHIRAGH DIN, xxx, 493.
- CHEESMAN, MAJOR R. E., M.B.O.U., F.R.G.S.—Report on the Mammals of Mesopotamia collected by the Mesopotamian Expeditionary Force, 1915-1919,

- xxviii, 323; Report on a Collection of Mammals made by Col. J. E. B. Hotson, in Shiraz, Persia, xxviii, 573; Zoological Investigations in the Persian Gulf and Iraq, xxvii, 1108. (See BUXTON, P. A.)
- CHETAL—See MAMMALS.
- CHIN HILLS—See BIRDS.
- CHINKARA—See MAMMALS.
- CHITTAGONG—See BIRDS.
- CHOPARD, L., D.Sc., Report on the Chiroptera of Mesopotamia and Persia (plate), xxvii, 759.
- CILIATES.—An Account of the Freshwater—from Lahore, xxx, 744.
- CLAYTON, F.—Mimicry in Spiders, xxvi, 302.
- COBRA—See SNAKES.
- COCCIDS—See INSECTS.
- COLVIN, CAPT. E. J.—Late Stay of Teal (*Nettion crecca*), xxv, 301.
- Lt.-Col. E. J. D.—Notes on the Habits of the Mallard (*Anas boschas*), xxvi, 291.
- COLTART, D. HENRY NEVILLE.—Obituarial Notice, xxix, 266.
- CONNOR, Lt.-Col. F. POWEL, I.M.S.—Note on the Function of the ' Forceps ' in Forficulidæ, xxvi, 683; Notes on the Emergence from the Cocoon in the Lasiocampædæ, xxvi, 691.
- CONTRIBUTIONS—Some unusual—to the Society's Museum, xxvii, 966; Election of New Members and Contributions xxix, 306.
- COOPER, G. E. R.—Tiger climbing a Tree, xxix, 276.
- H. S.—The Mishmi Takin (*Budorcas taxicolor*), xxix, 550.
- COPLEY, HUGH—Double Growth of Horns in Sambhar, xxvii, 938; The Power of Scent in Wild Animals, xxvii, 262; The Tiger Making the ' Sambhar Call ', xxviii, 794; Sambhar Swinging by their Horns, xxviii, 794.
- CRAWFORD, W. M., I.C.S.—Butterfly Notes, xviii, 292.
- CROCODILE (S)—A Few Hints on Shooting, xxvii, 76;—Burying its Food, xxviii, 553; Catching, xxix, 300; A Mugger Shooting Experience, xxix, 1061;—Shooting and Snaring, xxviii, 809; Some Notes on the Method employed in Catching—in South India, xxviii, 1139; The Length attained by and the Habits of the Gharial (*G. gangeticus*), xxx, 703.
- CRUSTACEA—Freshwater—collected by Dr. P. A. Buxton in Mesopotamia and Persia, xxvii, 315.
- CUCKOO—See BIRDS, DISTRIBUTION.
- CUMMING, W. D.—Natural History Notes from Fao, xxvi, 292; Mesopotamian Bird Notes, xxvii, 173.
- CUNNINGHAM, Col. A. H.—The Roosting Flight of Crows, xxix, 289.

- CURRIE, A. J.—Occurrence of the Indian Red-breasted Fly-catcher (*Siphia hyperythra*) in the Deccan, xxvi, 667.
- CURRIE, M. M. L.—Notes on the Appearance of the Stiff-tailed Duck (*Oxyura leucocephala*) in the Mianwali District, xxix, 563.
- D'ABREU, E. A., F.Z.S.—*Eryx conicus* breeding in Captivity, xxiv, 193 ; An Albino Tiger from the Central Provinces, xxiv, 819 ; Some Cerambycids from Kurseong, xxvi, 155 ; The Bronze-backed Tree Snake (*Dendrolaphis tristis*) in the Central Provinces, xxv, 306 ; Pythons breeding in Captivity, xxv, 509 ; On an Undescribed Colour Variety of the Snake (*Zacoys mucosus*) from the Central Provinces, xxv, 753 ; On the Oology of the Niltavas, xxvii, 405 ; Note on the Nightjar in the Central Provinces, xxviii, 806.
- DARBHANGA—See BIRDS, INSECTS, BUTTERFLIES.
- DARJEELING—See MAMMALS.
- DAVISON, J.—Field Rats in the Deccan in 1879, xxvi, 1042.
- DAVIDSON, N.—Food of the Bull-frog (*Rana tigrina*), xxvi, 152.
- DAVIDSON, WINIFRED, M.—See B. N. H. S.
- DAWSON, H.—Extension of the Range of the Bronze-winged Dove, xxvi, 672.
- DEBBARMAN, P. M., B.Sc., M.R.A.S.—A Short Note on the Atrophic Abortion of the Inflorescence of the Onion (*Allium cepa*, L.), plate, xxvii, 179 ; A Short Note on the Instances of Syncarpy in *Magnifera indica*, L. and some other Tropical Plants, xxviii, 560.
- DELHI—See BIRDS.
- DHAR, H. H. THE MAHARAJA OF—Comment on the Colour-change of the Black Buck (*Antilope cervicapra*), xxix, 835.
- DHARAMSALA—See BIRDS.
- DONALD, C. H., F.Z.S., M.B.O.U.—The Raptores of the Punjab (plates), xxv, 23 ; The Height at which Birds are able to Fly, xxv, 332 ; The Span of Large Birds, xxv, 302 ; The Occurrence of the Indian Pitta (*Pitta brachyura*) in the Kangra District, Punjab, xxv, 497 ; Extention of the Habitat of the Hair-crested Drongo (*Chibia hottentotta*), xxv, 50 ; The Birds of Prey of the Punjab, Part I-VII. (See BIRDS, SYSTEMATIC) ; Some Birds of Prey of Mesopotamia, xxvi, 845 ; The Occurrence of the Ermine in the Punjab, xxvii, 624 ; Falconary—The Catching of Hawks and Falcons (plates), xxvii, 829 ; The Lämmergyer (*Gypætus barbatus*) and the Golden Eagle (*Aquila chryætus*), xxvii, 952 ; The Enemies of Butterflies, xxvii, 642 ; A Note on the Insect-eating Habits of the Indian Hornet (*Vespa cincta*), xxvii, 960 ; Flight of Migrating Birds, xxviii, 146 ; Migration of Eagles, xxix, 1054.
- DOVER, CEDRIC, F.E.S.—A Note on the Carpenter-bees in the Society's Collection, xxvii, 961 ; Some Interesting Specimens of the Pierid Genus *Euchloe*, xxviii, 1144 ; A Note on the Occurrence of a Species of the Family Raphididæ in British India, xxvii, 1146.
- DOVER, CEDRIC, F.E.S. AND BASIL-EDWARDS—A Note on the Habits of the Pariah Kite (*Milvus govinda*) and the Adjutant Stork (*Leptoptilus dubius*), xxviii, 633.

- DRACOTT, C. H.—Notes on the Flying Whiteant and Scorpions that Feed on them, xxvi, 873.
- DRECKMANN, REV. FR.—See OBITUARY.
- DRUMMOND, CAPT. J. G. P.—The Burmese Barred-back Pheasant (*Phasianus himiae burmannicus*), xxix, 562.
- DUKE, J. A.—Tigers (*Felis tigris*) attacking a Sloth Bear (*Melursus ursinus*), xxvi, 659; Spotted Deer (*Axis axis*) and the Wild Dogs (*Cuon dukhunensis*), xxvi, 661.
- DUNSMURE, A. H.—Trout Fishing in Ceylon, xxvii, 408.
- EARTHWORMS.—Habits of, xxvi, 879.
- EDITORS.—On the Methods of Measuring Tigers, xxvii, 391; 'Hopping' Pupa of a Curculionid Beetle, xxvii, 407; Some Splendid Black Buck Heads, xxvii, 626; A White Tiger in Captivity, xxvii, 932; Sore Neck in Sambhar, xxvii, 937; Egret Farming in Sind, xxvii, 944; Duck and Snipe in the Central Provinces, xxviii, 794.
- EDITORIAL.—xxvii, 182, 379, 618, 913; xxviii, 255, 520, 781; xxix, 542, 818, 1038; xxx, 210, 452, 689, 902.
- EGRET.—See BIRDS.
- ELLIS, E. V., I.F.S.—Butterflies of the Tharrawady and Pegu Yoma (map), xxv, 104; Hannington, F., I C.S., Obituary Notice, xxvi, 1037.
- ELLISON, BERNARD, C.—The Scheme for the Arrangement of the Collection of The Bombay Natural History Society in the Prince of Wales' Museum of Western India, xxvii, 917; The Progress of the Natural History Section in the Prince of Wales' Museum of Western India, xxviii, 777; Comparison of Tiger and Panther Skulls, xxviii, 789; Effect of Storm on Animals, xxviii, 1126; H. R. H. The Prince of Wales' Shooting in India in 1921 and 1922, Part I, xxviii, 675; Part II, xxviii, 1091; Part III, xxix, 179; Some Natural History Notes connected with the Prince of Wales' Tour in India, xxix, 71; Notes on the Habits of a Young Hornbill, xxix, 280; See PRATER, S. H. xxvii, 966.
- ELWES, H. J.—See OBITUARY.
- ENTOMOLOGISTS.—Notice to, xxix, 569.
- EUPHRATES; See BIRDS, SYSTEMATIC.
- EVANS, COL. G. H., C.I.E., C.B.E.—An Encounter with a Hamadryad (*Naia bungarus*), xxvii, 955; The Food of the Burmese Roller (*C. affinis*) and of the Ashy Drongo (*D. nigrescens*), xxvii, 954.
- EVANS, LT.-COL. W. H., F.Z.S., F.E.S.—Notes on Indian Butterflies, xxvi, 1021; xxvii, 86; xxviii, 30; A Note on the Species of the Genus *Mycalesis* of Lepidoptera, occurring within Indian Limits (plates), xxvii, 354; Butterfly collecting in India (figures) xxviii, 500; The Identification of Indian Butterflies, xxviii, 739, xxix, 330, 519, 780, 890.
- FAO—See CUMMING, W. D.

FENTON, LT.-COL. L. L.—Note on the Hamadryad or King Cobra (*Naja bungarus*) in North Kanara, xxv, 151 ; The Great Indian Spiders, Genus *Pacilotheria*, xxv, 153 ; The 'Preying Mantis' as an Entomologist, xxv, 154 ; The Hunting Leopard (*Cynelurus jubatus*) in Kathiawar, xxviii, 398 ; Obituarial Notice, xxviii, 519.

FERRAR, MAJOR L., I.A.—Occurrence of the Wood-snipe (*Gallinago nemoricola*) in Salsette, xxv, 146

FIELD, F. (REED.)—Note on the Eggs of *Prinia inornata*, the Indian Wren-Warbler, xxvi, 1043 ; Breeding of Black-necked Stork (*Xenorhynchus asiaticus*), xxvii, 171 ; Some Notes on the Butterflies of the Plains of the U. P., xxvii, 641 ; Rough List and Notes on Birds found Breeding in the Gonda District, Oudh, xxviii, 753 ; Notes on the Nesting of the Himalayan Tree-creeper (*Certhia himalayana*), xxviii, 1138.

FISH (ES)—A Large Carp from the Euphrates River, xxv, 308 ; Notes on Flies for Trout Fly-fishing in Kashmir, xxv, 757 ; How Trout were introduced into Kashmir, xxvi, 295 ; Large Carp from Mesopotamia, xxvi, 679 ; Large Carp from Mesopotamia, xxvi, 680 ; Large Carp from Mesopotamia, xxvii, 176 ; Trout fishing in Ceylon, xxvii, 408 ; Angling around Bombay, xxvii, 535 ; Trout Culture on the Nilgiris, xxvii, 898 ; Angling for *Barbus hexagonolepis* in Assam, xxvii, 957 ; The Madras Aquarium, xxvii, 621 ; Description of a New Gobioid—from Tuticorin, xxviii, 926,—and fishing in the Inle Lake, xxvii, 1038 ; Trout Food in Kashmir, xxix, 305 ; The Supply of—of our Western Coast, xxix, 482 ; An Unusually Large Labeo from the Indrayani River, xxix, 843 ; Further Notes on the Breeding Habits of the Pearl Spot—(*Etroplus suratensis*), xxix, 1064 ; Notes and descriptions of Indian—Part I, xxx, 36 ; Part II, xxx, 121 ; Part III, xxx, 314 ; Part IV, xxx, 640 ; Good Bag of Fresh Water Shark (*Wallago attu*), xxx, 230 ; Observations on the Breeding Habits of Some Fresh water—, in the Punjab, xxix, 958 ; Early Stages in the Development of Some Fresh water—in the Punjab, xxx, 531 ; A List of Fishes obtained in the Saran District, Behar, chiefly from the Ghogra River near the town of Chapra and its Vicinity, xxx, 707 ; The Occurrence of the Spiny-eel, xxx, 711 ; Formula for estimating Weight of Mahseer, xxx, 711 ; A Run of Fish on the Streams falling into the Yamdrok Tso, xxx, 922 ; Two Common 'Fire Fishes' of Madras, xxx, 921 ; A Tentative List of the Vertebrates of the Jalpaiguri District, Bengal, Part I, xxvi, 819 ; Part II, xxvi, 988, Part III, xxvii, 151.

FISHER, C. E. C., I.F.S.,—Examples of Mimicry in Spiders (with an Illustration), xxv, 760 ; The Habits of the Grey Mongoose, xxviii, 274 ; The Enemies of Butterflies, xxviii, 292 ; Drongo and Cicada, xxix, 839.

FITZPATRICK, J.—Folklore of Birds and Beasts of India, xxviii, 562.

FLOWER, CAPT. C. S.—The Span of Large Birds, xxv, 752.

FORSYTH, W. A.—Fresh Hypothesis in regard to Protective Colouration in Animals, xxix, 829.

FOSTER, MAJOR R. T.—The Corvidæ of the Punjab, xxix, 841.

FOWLER, HENRY W. AND HORNELL, JAMES.—Description of a New Gobioid Fish from Tuticorin, xxviii, 924.

FOX, E. BROOK, M.I.C.E.—The Mysterious 'Joor', xxvii, 175.

FRASER, MAJOR F. C., I. M. S., F. E. S.—The Female of the Dragonfly *Brachythemis fuscopalliat*a, Ris. (plate), xxv, 282; Note on a Flight of Sphingidæ, xxv, 155; Two New Indian Dragonflies, xxv, 383; Indian Dragonflies, Part I-XXVIII (See Insects, systematic); The Influence of the Monsoons on Insect Life in India, xxv, 511; The Undescribed Female of an Indian Dragonfly (*Hemicordulia asiatica*), xxvi, 685; Notes on Some New and other Indian Dragonflies, xxvi, 874; Some New Indian Dragonflies, xxvii, 147; A List of Dragonflies from Mahableshwar, xxvii, 540; Notes on New and Rare Dragonflies (text-figures), xxviii, 698; Dragonfly collecting in India, Part I, xxviii, 839; Part II, xxix, 48; Part III, xxix, 474; Part IV, xxix, 741.

FRASER, S. M.—Tiger and Goat, xxvii, 163.

FRERE, MAJOR A. G., I.A.—Roosting Habits of the Common Babbler, (*Argya caudata*), xxviii, 280; An Aggressive Phoorra (*Echis carinata*) xxviii, 291; The Black Rock Scorpion (*Palamncus swammerdami*), xxviii, 558.

FROGS AND TOADS—Food of the Bull Frog (*Rana tigrina*), xxv, 152; The Habits of the Tree-Frog (*Rhacophorus maculatus*), xxvi, 681; Some South Indian Batrachians (plates), xxvii, 119; Notes on Some Lizards, Frogs and Human Beings in the Nilgiri Hills, xxviii, 493; Notes on a collection of Batrachians from S. Waziristan, xxix, 131; A Tentative List of the Vertebrates of the Jalpaiguri District, Bengal, Part I, xxvi, 819; Part II, xxvi, 988; Part III, xxvii, 151.

FRY, T. B.—A Collection of Mammals made by H. Stevens in Darjeeling District, xxix, 90.

GARO HILLS—See MAMMALS.

GARWAL—See BIRDS.

GEOLOGY—Geology of Worli Hill, xxvii, 582.

GHOSE, S. L., M.Sc.—The Cone of *Selaginella pallidissima* Sport (plate), xxv, 284.

GIBSON, R. E., I.C.S.—Comb Duck (*Sarcidiornis melanonotus*) in Sind, xxv, 747.

GILL, E. H. N.—Nidification of the Himalayan Long-billed Vulture (*Gyps tenuirostris*), xxvii, 951; A Description of the Nests and Eggs of the Common Birds occurring in the Plains of the United Provinces (plate), xxviii, 1069; Part II, xxix, 107; Part III, xxix, 354; Part IV, xxix, 936; Plumage displayed by the Sirkeer Cuckoo, xxix, 299; Notes on a Large Monitor (*Varanus* Sp.) in Ghazipur, xxix, 303.

GOA.—See MAMMALS.

GOALPARA.—See BIRDS.

GORAL.—See MAMMALS.

GOSSE, CAPT. PHILIP, R.A.M.C.—Nilgiri Trap for Catching Wild Animals, xxvi, 311.

- GRAVELY, F. H., D.Sc.—Common Indian Spiders (plates), xxviii, 1045.
- GREEN, E. ERNEST, F.Z.S., F.L.S.—Supplementary Notes on the Coccidæ of Ceylon, Part IV, xxviii, 1007.
- GREYTHER, DR. T.—Destruction of Birds' Nests, xxviii, 799.
- GRIEVE, MAJOR, F. C. L., R.F.A.—List of Small Game Shot in Mhow during 1921 and 1922, xxix, 293.
- GULMARG—See BIRDS.
- GUNA—See MAMMALS.
- HALL, ELEANOR FRANCES—Notes on the Nidification of the Common Grey Hornbill (*Lophoceros birostris*), xxv, 505.
- HALLBERG, PROF. F.—See BLATTER, E.
- HAMADRYAD—See SNAKES.
- HAMILTON, LT.-COL., R.E.A.—The Beatrix or Arabian Oryx (*Oryx leucoryx*), in Central Arabia (plate), xxvii, 283.
- HANHART, S.—Strange Behaviour of a Panther, xxix, 549.
- HANNYNGTON, F., I.C.S.—Life History Notes on Coorg Butterflies, xxvi, 871; Obituary Notice, xxvi, 1037.
- HEATH, REGINALD H.—Porcupine's Mode of Attack, xxvi, 282; Record Female Indian Gazell (*Gazella bennetti*), xxvii, 625.
- HEDGEHOG—See MAMMALS.
- HIDE, PERCY—Late Stay of Common Snipe (*Gallinago coelestis*) in Central India, xxvi, 849; Late Stay of Snipe in 1922, xxix, 296.
- HIGGINS, J. C., I.C.S.—The Sheldrake (*Tadorna cornuta*) in Manipur State, xxvi, 675; Manipuri Names of Certain Birds, xxviii, 288.
- HINGSTON, MAJOR R. W. G., M.C., M.B., I.M.S.—A List of the Birds of Dharmasala (plates), xxvii, 555; The Snare of the Giant Wood Spider (*Nephila maculata*); Part I, xxviii, 642; Part II, xxviii, 911; Part III, Further Lessons from Nephila, xxviii, 917; Part IV, xxix, 70; The Red Ant, Part I, The Nest, xxix, 362.
- HINTON, M.A.C.—The Synonymies, Character and Distribution of Maccaques included under the names *rhesus* and *assamensis* in Blanford's Mammals, xxvi, 665; On the Nomenclature of the South Indian Long-tailed Maccaques, xxvi, 813; See B. N. H. S. SCIENTIFIC RESULTS FROM THE MAMMAL SURVEY No. xxxvi; On the Capped Langur (*Pithecus pilatus*, Blyth) and its Allies.
- HINTON, M. A. C. AND FRY, T. B.—See B.N.H.S., xxix, 399.
- HOME, MAJOR W. M. LOGAN—Note on the Nightjar (*Caprimalgus ægypticus*), xxvi, 1043; Power of Scent in Wild Animals, xxviii, 788.
- HONEY-SUCKER—See BIRDS, NIDIFICATION.
- HORNBILL—See BIRDS, DISTRIBUTION.

- HORNELL, JAMES, F.L.S., F.R.A.I.—The Madras Aquarium, xxix, 549; Pearl-bearing Mussels, xxviii, 813.
- HORNELL, JAMES, AND FOWLER, HENRY W.—See FOWLER; Some Commensals of Indian Alcyonarians and Crabs, xxviii, 924; Note on the Operculum of the Turban-shells, xxviii, 1143.
- HOTSON, J. E. B., I.A.R.O.—Oleander Poisoning Camels, xxvi, 306.
- HUDSON, COL. C., I.M.S.—Some Birds observed in South Waziristan xxvii, 402.
- HUNDLEY, GORDON—Twin Calf Elephants (plate), xxvii, 628; The Breeding of Elephants in Captivity, xxviii, 537.
- HUTTON J. H.—Sore Neck in Sambhar, xxviii, 533; Hornbills in Captivity, xxviii, 533; Indian Hornet, xxviii, 534; Occurrence of the Stripe-backed Weasel (*Mustela strigidorsa*) in the Naga Hills, xxviii, 795.
- HYDRA—A Note on the Reproduction of the common — of Bengal (*Hydra vulgaris*, Pallas), xxviii, 1147.
- IMAM BUM.—See BIRDS AND MAMMALS.
- INGLIS, C. M.—Occurrence of the Ashy Wood-pigeon (*Alsocomus pulchricollis*) in the Jalpaiguri District, xxv, 300; Arrival of Duck and Teal in the Darbhanga District, Behar, xxv, 499; Some Notes on the Burmese Peafowl (*Pavo muticus*) in Captivity, xxv, 500; Note on the Kalij Pheasant especially on a specimen from the Goalpara District, Assam, xxv, 505; Fight between *Vespa cincta*, Fabr. and *Polistes hebraeus*, Fabr, xxv, 511; Black-headed Sibia (*Lioptila capistrata*) in the Jalpaiguri District, Bengal, xxv, 742; Occurrence of the White-tailed Blue Robin (*Notodola leucura*) in the Buxa Duars District, Bengal, xxv, 742; The Burmese Peafowl (*Pavo muticus*) in the Chittagong Hill Tracts, Bengal, xxvi, 673; Nidification of stone's Pheasant (*Phasianus elegans*), A Correction, xxvi, 673; Extracts from 'A Monograph of the Pheasants' by William Beebe, xxvi, 847; The Black-Breasted Kalij Pheasant (*Gennæus horsfieldi horsfieldi*) East of the Irrawaddy, xxvi, 848; Further Occurrence of the Rose-coloured Starling (*Pastor roseus*) in the Darbhanga District, Behar, xxvi, 853; Early appearance of *Pieris brassicæ*, L., in the Darbhanga District, Behar, xxvi, 869; *Harpactor costalis*, Stal., Preying on *Ceratina vividissima*, D. T., xxvi, 872; Early Occurrence of the Painted Lady (*Vanessa cardui*, L.) in the Darbhanga District, Behar xxvi, 1046; Re-occurrence of the Indian Pitta (*Pitta brachyura*) in the Darbhanga District, Behar, xxvii, 402; Snaring Quail in North Behar (plate), xxvii, 947; Abnormal Coloured Eggs of the Pheasant-tailed Jacana (*Hydrophasianus chirurgus*), xxvii, 403; The Food of the Small Indian Civet (*Vivericula malaccensis*) in Captivity, xxviii, 265; Breeding of the Kyah or Marsh Partridge (*Francolinus gularis*) in Captivity in Behar, xxviii, 287; Some Comments on and Corrections of Previous Articles in the Journal No. 1, xxviii, 1117; Note on Jackal (*Canis indicus indicus*), etc., in a compound, xxviii, 1122; Jackals attacking a Spaniel in the Compound, xxviii, 1122; Description of Chick of the Bengal Florican (*Sypheotes bengalensis*), xxviii, 1133; Curious site for the nest of the Bengal Red-vented Bulbul (*Molpastes huemorrhous bengalensis*), xxviii, 1135; The Fauna of the Darbhanga District, North Behar, xxix, 136; Plumage of adult Mallard (*Anas platyrhynchos*) and

Notes on Woodcock and Snipe in the Nilgiris, xxix, 564 ; Further Notes on Snaring Quail in North Behar (plate), xxix, 565 ; An Unusual Swarm of Moths, xxix, 567.

INGLIS, C. M., TRAVERS, W. L., O'DONEL, H. V. O AND SHEBBEARE, E. O., I.F.S.—A Tentative List of the Vertebrates of the Jalpaiguri District, Bengal (plates), Part I, xxvi, 819 ; Part II, xxvi, 988 ; Part III, xxvii, 151.

INGOLDBY, CAPT. C. M., R.A.M.C., F.R.G.S., F.Z.S.—A New Stone Gecko from the Himalayas, xxviii, 1051.

INGOLDBY, CAPT. C. M. AND MISS JOAN B. PROCTER, F.Z.S.—Notes on a Collection of Reptiles from Waziristan and the Adjoining Portion of the N. W. Frontier Province (plates), xxix, 117.

INLE LAKE.—See FISH.

#### INSECTS (LEPIDOPTERA)—SYSTEMATIC.

##### BUTTERFLIES—

The Common Butterflies of the Plains of India—

Part XX.—*Chilades*, *Talicada*, *Lycænesthes*, *Everes*, *Nacaduba*, xxv, 636.

Part XXI.—*Jamides*, *Catachrysops*, *Tarucus*, *Castalius*, *Lampides*, *Curetis*, xxvi, 98.

Part XXII.—*Iraota*, *Surendra*, *Mahathala*, *Amblypodia*, *Arhopala*, *Zezius*, *Creon* and *Partapa*, *Tajuria*, *Aphnæus*, *Chliaria*, xxvi, 438.

Part XXIII.—*Thaduka*, *Zeltus*, *Rathinda*, *Catapœcilma*, *Horaga*, *Loxura*, *Deudorix*, xxvi, 750.

Part XXIV.—*Rapala*, *Cheritra*, *Bindahara*, xxvi, 941.

Part XXV.—*Virachola*, xxvii, 26.

Part XXVI.—*Hesperiidæ* (key) xxvii, 211.

Part XXVII.—*Hesperiidæ* (contd.) xxvii, 431.

Part XXVIII.—*Hesperiidæ* (contd.) xxvii, 778.

Part XXIX.—(Contd from p. 793 of vol. xxvii) *Celænorhynchus*, *Daimio*, *Tagiades*, xxix, 429.

Part XXX.—*Odontoptilum*, *Abaratha*, *Colandenia*, xxix, 703.

Part XXXI.—*Sarangesa*, *Tapena*, *Hesperia*, *Gomalia*, xxix, 921.

Part XXXII.—*Ismene*, *Hasora*, xxx, 132.

Part XXXIII.—*Hasora*, *Bibasis*, *Badamia*, *Rhopalocamptia*, xxx, 285.

Part XXXIV.—*Plastingia*, *Suastus*, *Arnetta*, *Zographetus*, *Matapa*, *Gangara*, *Erionota*, xxx, 561.

Part XXXV.—*Taractrocera*, *Ampittia*, *Aeromachus*, xxx, 822.

##### THE IDENTIFICATION OF INDIAN BUTTERFLIES—

Part I.—(Introduction and Key), xxviii, 739 ; *Papilionidæ*, *Pieridæ*, xxix, 230.

Part II.—*Danaidæ*, *Satyridæ*, xxix, 519.

Part III.—*Satyridæ*, *Amathusiidæ*, xxix, 780.

Part IV.—*Nymphalidæ*, xxix, 890.

Part V.—*Nymphalidæ*, xxx, 72.

Part VI.—*Erycinidæ*, *Lycænidæ*, xxx, 322.

Part VII.—*Lycænidæ*, xxx, 610.

Part VIII.—*Lycænidæ*, xxx, 756.

#### BUTTERFLIES (GEOGRAPHY)—

MESOPOTAMIA—The Butterflies of Mesopotamia, xxviii, 50.

N. W. F. PROVINCES AND PUNJAB—The Butterflies of Lahore, xxv, 136.

UNITED PROVINCES—Some Butterflies taken in Benares and adjoining Districts, xxvi, 689 ; Some Notes of the Butterflies of the Plains of the U. P., xxvii, 641 ; Naini Tal Butterfly Notes, xxvi, 870.

ASSAM AND BURMA—Butterflies of the Tharrawaddy and the Pegu Yoma, xxv, 104 ; Occurrence of *Stichopthalma godfreyi* (Roths.), xxvi, 867 ; The Occurrence of *Teinopalpus imperialis* in the Toungoo Hills, Burma, xxvii, 406 ; A List of Butterflies collected in the Tavoy District, Burma, xxvii, 883 ; xxviii, 123.

BENGAL—Early Appearance of *Pieris brassicæ*, Linn., in the Darbhanga District, xxvi, 869 ; Early Occurrence of the Painted Lady (*Vanessa cardui*, L.) in the Darbhanga District, xxvi, 1046.

COORG—Life-history Notes on Coorg Butterflies, xxvi, 871.

ENTOMOLOGICAL—The Packing of Papered Butterflies for Safe-keeping or Despatch by Post, xxv, 309.

GENERAL—Notes on Indian Butterflies, xxvi, 1021 ; xxvii, 86 ; The Enemies of Butterflies, xxvii, 642 ; Notes on Indian Butterflies, xxviii, 30 ; The Enemies of Butterflies, xxviii, 292 ; Butterfly notes, xxviii, 292 ; Butterflies at Sea, xxviii, 293 ; Notes on the Generic Names of Indian Theclinae and Amblypodinae, xxviii, 465 ; A Note on the Discrepancies in the Fauna British India (Butterflies), xxix, 844 ; Some Interesting Specimens of Pierids, Genus *Euchlæ*, xxviii, 1144 ; A Note on the Species of the Genus *Mycalesis* of Lepidoptera, occurring within Indian Limits, xxvii, 354 ; Curious Case of Protective Mimicry in a Caterpillar, xxvii, 962 ; Butterfly collecting in India, xxviii, 500 ; Butterfly feeding on Excreta, xxvii, 558.

INDIVIDUAL SPECIES.—Notes on the Habits of Butterflies (*Zeuxidia masoni* and *Xanthotenia busiris*), xxvi, 869 ; Curious Method of Feeding noted in *Danais limniace*, Cram, xxvi, 1047 ; Strange Find of the Larva of the Butterfly *Teinopalpus imperialis*, xxvii, 178 ; Extraordinary Display of ' *Leucodice soracte* ' of the Genus ' *Aporia* ', xxvii, 354 ; Protective Habit of the larva of *Trypanophora semihyalina*, Koll., xxvi, 693 ; The Ceylon Races of *Terias blanda*, Bdv., and *sari*, Horsf., xxx, 714.

#### INSECTS (HETEROCERA)—

MOTHS (GENERAL)—Note on a Flight of *Sphingidæ*, xxv, 155 ; Notes on the Larva of *Diliphrila livornica* (Striped Hawk Moth), xxv, 156 ; Notes on the Habits of the Death's-Head Moth (*Acherontia styx*), xxv, 759 ; Notes

on the Larva of *Chærocampa alecto*, xxvi, 299 ; Life History of *Antheræa roylei*, the Oak Emperor Moth, xxvi, 300 ; Notes on the emergence from the Cocoon in *Lasiocampidæ*, xxvi, 691 ; The Hawk Moth, (*Dilephila, livornica*), A Correction, xxvi, 872 ; The Life History of rare and little known *Sphingidæ* (Hawk Moths) of the Oriental Region, xxvii, 745 ; New Localities for rare and little known *Sphingidæ*, xxvii, 964 ; An Unusual Swarm of Moths, xxviii, 814 ; xxix, 567.

MOTHS (SYSTEMATIC)—MOTHS OF MESOPOTAMIA and N. W. PERSIA, xxvii, 170 ; A New Hawk Moth, xxvii, 177.

NEUROPTERA—(SYSTEMATIC)—

DRAGONFLIES AND ANT-LIONS—

Part I.—Introduction and Terminology, xxv, 454.

Part II.—Key to Families. *Tetrathemis*, *Hylæothemis*, *Agrionoptera*, *Amphithemis*, xxv, 608.

Part III.—*Lyrothemis*, *Potomarcha*, *Lathrecista*, *Libellula*, *Cratilla*, *Orthetrum*, xxvi, 141.

Part IV.—*Palpopleura*, *Brachydiplax*, *Acisoma*, *Sympetrum*, *Diaplocodes*, *Rhodothemis*, *Neurothemis*, *Bradinopyga*, *Crocothemis*, xxvi, 488.

Part V.—*Indothemis*, *Brachythemis*, *Zygonyx*, *Onychothemis*, xxvi, 734.

Part VI.—*Trithemis*, *Rhyothemis*, xxvi, 919.

Part VII.—*Rhyothemis*, *Pantala*, *Tramea*, *Hydrobasileus*, xxvii, 48.

Part VIII.—*Tholymis*, *Zygomma*, *Camacina*, *Aethriamantha*, *Urothemis*, *Macrodiplax*, *Selysiothemis*, xxvii, 253.

Part IX.—*Lyriothemis*, *Brachythemis*, *Nannophya* (Errata and Addenda), xxvii, 492.

Part X.—*Hemicordulia*, *Epophthalmia*, *Macronia*, *Phyllomacromia*, *Idionyx*, xxvii, 673.

Part XI.—*Æschnidæ*, *Anax*, *Hemianax*, xxviii, 107.

Part XII.—*Anaciaeschna*, *Æschna*, xxviii, 481.

Part XIII.—*Jagoria*, *Periæschna*, *Austroæschna*, *Cephalæschna*, *Gynacanthæschna*, xxviii, 610.

Part XIV.—*Gynacanthæschna*, *Anax*, *Amphisæschna*, *Gynacantha*, xxviii, 899.

Part XV.—*Cordulegasterinæ*, *Allogaster*, *Anotogaster*, *Cordulegaster*, *Orogomphus*, xxix, 36.

Part XVI.—*Gomphinæ*, key to *Cordulegaster* and *Gomphinæ*, xxix, 324.

Part XVII.—*Lindenia*, *Ictinus*, *Gomphidia*, *Heterogomphus*, xxix, 659.

Part XVIII.—*Lamellogomphus*, *Mesogomphus*, *Onychogomphus*, xxix, 982.

Part XIX.—*Onychogomphus*, xxx, 106.

Part XX.—*Stylogomphus*, *Ophiogomphus*, *Indogomphus*, xxx, 397.

Part XXI.—*Gomphus*, xxx, 657.

Part XXII.—*Heliogomphus*, *Microgomphus*, xxx, 846.

NEUROPTERA—(SYSTEMATIC)—

DRAGONFLIES—ANT-LIONS—

INDIAN DRAGONFLIES

- Part I—(13 plates), xxv, 454.
- Part II—(5 text-figures), xxv, 608
- Part III—(12 text-figures), xxvi, 141.
- Part IV—(14 text-figures), xxvi, 488.
- Part V—(text-figures), xxvi, 734.
- Part VI—(text-figures), xxvi, 919.
- Part VII—(text-figures), xxvii, 48.
- Part VIII—(text-figures), xxvii, 253.
- Part IX—(4 text-figures), xxvii, 492.
- Part X—(5 text-figures), xxvii, 673.
- Part XI—(4 text-figures), xxviii, 107.
- Part XII—(3 text-figures), xxvii, 481.
- Part XIII—(5 text-figures), xxviii, 610.
- Part XIV—(3 text-figures), xxviii, 899.
- Part XV—(6 text-figures), xxix, 36.
- Part XVI—(3 text-figures), xxix, 324.
- Part XVII—(2 plates and 1 text-figure), xxix, 659.
- Part XVIII—(2 plates and 2 text-figures), xxix, 982.
- Part XIX—(1 plate and 2 text-figures), xxx, 106.
- Part XX—(1 plate and 2 text-figures), xxx, 397.
- Part XXXI—(1 plate and 1 text-figure), xxx, 657.
- Part XXII—(1 plate and text-figure), xxx, 846.

The Female of the Dragonfly *Brachythemis fuscopalliata*, Ris., xxv, 282 ; Two New Indian Dragonflies, xxv, 383 ; The Undescribed Female of an Indian Dragonfly (*Hemicordulia asiatica*), xxvi, 685 ; Notes on Some New and Other Dragonflies, xxvi, 874 ; Some New Indian Dragonflies, xxvii, 147 ; A List of Dragonflies from Mahableshwar, xxvii, 540 ; Notes on New and Rare Indian Dragonflies, xxvii, 698 ; New Additions to the Odonate (Dragonfly) Fauna of India, xxx, 48 ; Libellulines at St. Thomas' Mount, Madras, xxvi, 685 ; A Note on the Occurrence of a Species of the Family Raphididae in British India, xxviii, 1146.

DRAGONFLY COLLECTING IN INDIA, Part I, xxvii, 889 ; Part II, xxix, 48 ; Part III, xxix, 474 ; Part IV, xxix, 741.

TERMITES—(White-ants)—Notes on flying White-ants and Scorpions the feed on them, xxvi, 873 ; Termite Mounds, xxx, 25.

ORTHOPTERA—

GRASSHOPPERS, CRICKETS, MANTIS, ETC.—The 'Praying Mantis' as an Entomologist, xxv, 154 ; A Contribution to Our Knowledge of the

Orthoptera, Acridiidea of Mesopotamia and North-western Persia, xxvii, 803; Earwigs from Mesopotamia and North-western Persia, xxvii, 963; Three New Alpine Orthoptera from Central Asia, xxvii, 71; Records and Descriptions of Orthoptera from S. W. Asia, xxviii, 719; A Long Neglected Group of Insects, xxviii, 1149; Some New and Interesting Orthoptera from Persia, Baluchistan and Western India, xxix, 643; Notes on the Acrididae (Orthoptera) of Central Asia with descriptions of New Species and Races, xxx, 260; Some New Alpine Grasshoppers of the Genus *Conophynea*, Zab. from Central Asia, xxx, 551; The Name of a Mesopotamian Earwig, xxvii, 407.

#### COLEOPTERA—

BEETLES—Some Cerambycids from Kurseong, xxv, 155; Life History of the 'Buprestid' Leaf Miner, *Trachys bicolor*, Kermans, a pest on *Butea frondosa* in Mysore, xxvii, 178; Hopping Pupa of a Curculionid Beetle, xxvii, 407; New and Little known Indian Bombyliidae, xxvii, 630; xxviii, 883; An Undescribed Coccinelid Beetle of Economic Importance, xxx, 491; A List of Heteromorous Coleoptera collected mainly during the War, by Members of H. M. Forces in Mesopotamia, xxx, 428.

INSECTS—HEMIPTERA—PLANT BUGS—Notes on the Supposed Effects of the Bite of a Pentatomid Bug (*Halys dentatus*), xxvi, 694; *Harpactor corticalis* Stal. preying on *Cerantia viridissima*, D.T., xxvi, 872; *Coptosoma ostensum*, Dist. and its enemy *Synia melanaria*, Muls., xxx, 924.

#### HOMOPTERA—

COCCIDS, SCALE INSECTS, CICADAS—Some South Indian Coccids of Economic Importance, xxvi, 621.

#### THYSANOPTERA—

Two New Thysanoptera from South India, xxx, 788; An Annotated List of the Thysanoptera known from India and Ceylon, xxx, 861.

GENERAL—The Influence of the Monsoon on Insect Life in India, xxv, 511; Insects living in Snow at 14,000 ft., xxvii, 639.

#### INSECTS (HYMENOPTERA)—

BEES AND WASPS—A Catalogue of New Wasps and Bees, Part III, xxv, 92; Fight between *Vespa cincta*, Fabr. and *Polistes hebraeus*, Fabr., xxv, 511; Nesting Habits of *Vespa dorylloides*, Sauss., xxvi, 301; Tenacity of Life of *Parapolybia orientalis*, xxvi, 693; A Note on the Insect-eating Habits of the Indian Hornet (*Vespa cincta*), xxvii, 960; A Note on Carpenter Bees in the Society's Collection, xxviii, 961; Annotated List of the Acculeate Hymenoptera (except Heterogyna) and Chrysidids recently collected in Mesopotamia and North-west Persia (8 text-figures), xxvii, 816; xxviii, 192; On the Habits of a Sceliphron Wasp (*S. deforme*), xxviii, 293; Notes on the Status of Parasitic Hymenoptera in S. India, xxx, 487; An Oriental Hunting Wasp (*Sphex lobatus*), xxx, 735; Note on a Nest of the Common Indian Hornet, xxx, 858; Ants attacking Bees, xxvi, 878; Observations on the nesting of *Eumenes conica*, xxix, 304.

ANTS—A Note on the Function of the 'forceps' in Formiculidae, xxvi, 688; Ants attacking Bees, xxvi, 878; The Red Ant, Part I, xxix, 362; Part II, xxix, 681; Part III, xxix, 908; Noises made by Ants, xxix, 567; The Cremastogaster Ant, xxx, 541.

INSECTS (*Diptera*)—

FLIES—The Distance Mosquitoes can fly, xxv, 511 ; On Indian Parasitic Flies, Part I, xxviii, 370 ; Part II, xxviii, 703 ; Part III, xxviii, 957.

IRELAND, S. G. De. C., I.C.S.—Nidification of the Lesser or Common Whistling Teal (*Dendrocygna javanica*) and Bonelli's Eagle (*Hieraetus fasciatus*), xxv, 499.

ISOPODA, TERRESTRIAL—Of Mesopotamia and the Surrounding Districts, xxix, 93.

INVERARITY, J. D.—*See* OBITUARY.

JACKALS—*See* MAMMALS.

JACKSON, MRS. V. A.—Notes on a Young Hog-badger (*Arctonyx* sp.) in the Garo Hills, xxvi, 281 ; Panic among Elephants during an Earthquake, xxvi, 285 ; Further Notes on the Hog-badger, xxvi, 281.

JACOB, I. R., I.P. ; An Arboreal Panther, xxv, 148.

JALPAIGURI,—*See* BIRDS, MAMMALS, REPTILES, FROGS, TOADS, FISH.

JONES, A. E.—A List of Birds from the Simla Hills, 1908-1918, xxvi, 601 ; Further Notes on the Birds of Amballa District, Punjab, xxvi, 675 ; Bird Notes from the Campbellpur—Attock District, Western Punjab, xxvii, 794 ; The Breeding of the Eastern Orphean Warbler (*Silvia jerdoni*, Blyth) in the N. W. Frontier Province, xxvii, 630 ; Occurrence of the Black-throated Diver (*Colymbus articus*) in India, xxviii, 1134 ; Nightjars on the Simla Hills, xxix, 286.

JONES, W. T. W.—A Curious Incident while Duck Shooting, xxix, 563.

JOOR—The Mysterious, xxvii, 175.

JOURDAIN, F. C. R.—Mesopotamian Bird Notes, xxvi, 860 ; White-headed Duck Shot near Quetta, xxvii, 954.

KARE, J. L.—Observation on the Nesting of *Eumenes conica*, xxix, 304.

KASHMIR—*See* BIRDS, MAMMALS.

KASHYAP, SHIV RAM, M.Sc., B.A.—Liverworts of the Western Himalayas and the Punjab, with Notes on known Species and Description of New Species, xxv, 279.

KATHIAWAR—*See* MAMMALS.

KENNION, Miss I. A.—A Baby Hog Deer in Captivity (plate), xxviii, 271 ; Crocodile Shooting in Nepal, xxviii, 291.

KENNY, E. T.—Migration of Snipe in Burma, xxvi, 850.

KHANDALA—*See* MAMMALS (GEOGRAPHY).

KING, CAPT. E. O.—Common Pochard (*N. ferrina*) at Bangalore, xxvii, 172.

KING-CROW—(*See* BIRDS, HABITS).

KING VULTURE—*See* BIRDS.

- KINLOCH, A. M.—The Cotton Teal in Malabar, xxvi, 674 ; The Habits of the Green Whip-snake (*Dryophis mycterizans*), xxvi, 681 ; Leopard Cat (*Felis bengalensis*) in Captivity, xxvii, 623.
- KINLOCH, LT. A. P.—Record Female, Nilgiri Thar (*Hemitragus hylacrius*), xxvi, 666 ; Rough Notes on the Avifauna of the Nelliampathy Hills, xxvii, 939 ; Occurrence of the Pied Ground Thrush (*Geocichla wardi*) on the Nelliampathy Hills, xxvii, 944 ; The Avifauna of the Nelliampathy Hills, xxviii, 279 ; Habits of the Southern Scimitar Babbler (*Pomatorhinus horsfieldi travancoriensis*), xxviii, 545 ; Nidification of the Southern Red-whiskered Bulbul (*Otocompsa emeria fuscicaudata*), xxviii, 545 ; Woodpeckers 'Roosting', xxviii, 546 ; Leach attacking a Snake, xxviii, 557 ; Food of the Snail (*Indrella ampula*), xxviii, 557 ; The White-throated Ground Thrush (*Geocichla cyanotus*) as a Mimic, xxviii, 805 ; Further Notes on the Avifauna of the Nelliampathy Hills, xxix, 294 ; The Great Indian Hornbill (*D. bicornis*), xxix, 294 ; The Large Mammals of the Nelliampathy Hills, xxix, 552 ; Nidification of the Malabar Great Black Woodpecker (*Thriponax hodgsoni*), xxix, 561 ; On the Birds of the Nelliampathy Hills, xxix, 564 ; Noises made by Ants, xxix, 567.
- KINNEAR, N.B., C.M.Z.S.—Note on the Malabar Slender Loris (*Loris lydekkerianus*), xxvi, 836 ; Extention of the Range of the Green Imperial Pigeon (*Carpophaga aenea aenea*) in Western India, xxvi, 846 ; The Giant Tortoise (living in Ceylon, plate), xxvi, 861 ; The Past and Present Distribution of the Lion in South-eastern Asia, xxvii, 33.
- KLOSS, C. BODEN—Tree Shrews, Tsine and Serows, xxix, 555.
- KULKARNI, L. B.—A Case of Plant Surgery, xxviii, 815.
- KURSEONG—See INSECTS.
- KYRLE, FELLOWES—Occurrence of the Lesser Florican or Likh (*S. aurita*) in the Mahableshwar Hills, xxvi, 289.
- LADAK—See BIRDS, MAMMALS.
- LAHORE—See INSECTS, BUTTERFLIES.
- LANE, MAJOR F. B.—Large Carp from Mesopotamia, xxvii, 176.
- LANE, MAJOR W.H.—The Game Fishes of the Persian Gulf, xxv, 121.
- LAW, S. C.—Melanism in the Red-vented Bulbul (*Molpastes* sp.), xxvii, 629 ; Is the Dhayal (*Copsychus saularis*) a Mimic? xxviii, 1133 ; An Albinoid *Otocompsa emeria*, xxviii, 281 ; The Incubation Period of Bulbul's Eggs, xxix, 1056 ; Note on the White-bellied Sea Eagle (*Haliaeetus leucogaster*), xxix, 1059.
- LEOPARD, HUNTING—See MAMMALS.
- LIGHT, LT.-COL., R.—Size of Tigers, xxvi, 659 ; Porcupine's Method of Shedding Quills when attacked, xxvi, 666.
- LIGHT, MAJOR, W. A.—A Large Carp from the Euphrates River, xxv, 308.
- LINDGREN, OSCAR—Strange Find of the Larva of the Butterfly, *Teinopalpus imperialis*, xxviii, 178.

LION—See MAMMALS.

LISTON, LT.-COL. W., GLEN, M.D., Ph.D., I.M.S., C.I.E.—A Note on a Case of a Bite by a Russell's Viper treated with Antivenine Intravenously, xxvii, 643.

LIVESEY, T. R.—Eggs of the Pheasant-tailed Jacana (*Hydrophasianus cherurgus*), xxvii, 954; Nest of Nukta or Comb Duck (*S. melanotus*), xxvii, 637; Birds of Mesopotamia, xxviii, 791; The Indian Lion, xxviii, 795; Birds of Mesopotamia, xxviii, 1119.

LIVERWORTS—See BOTANY.

LIZARD (S)—Description of a New — of the Genus *Acanthodactylus* from Mesopotamia, xxv, 373; Occurrence of *Calotis vestalis* and *ornata* at Unao, xxvi, 868; A List of — from Mesopotamia collected by the Members Mesopotamian Expeditionary Force, 1915-1919, xxvii, 351; Further — and Snakes from Persia and Mesopotamia, xxviii, 251; Notes on Some Frogs and Human Beings in the Nilgiri Hills, xxviii, 493; (Comment), xxviii, 791; Food of the Fat-tailed—(*Eublepharis macularius*), xxviii, 811; A New Stone Gecko from the Himalayas, xxviii, 1051; A Note on Cannibalism in a Gecko, xxx, 228; Vegetable Diet of the Common House —, xxviii, 409; Notes on a Large Monitor (*Varanus* sp.) in Ghazipur, xxix, 303; Notes on a Collection of Reptilia from Waziristan and the Adjoining Portion of the N.W. Frontier Province, xxix, 117; A Tentative List of the Vertebrates of the Jalpaiguri District, Bengal, Part I, xxvi, 819; Part II, xxvi, 988; Part III, xxviii, 151.

LOCUSTS—See INSECTS.

LONGRIGG, J. H., I.F.S.—Panther in a Tree with a Pig, xxvii, 935.

LOWRIE, CAPT. A. E., I.A.R.O.—The Indian Grackle or Hill Mynah (*Graculus intermedius*) resident in Calcutta, xxv, 297.

LUARD, MAJOR, C. E., I.A.—The Bronze-backed Tree Snake (*Dendrelaphis tristis*) in Central India, xxv, 306; The Varieties of Cobras in Central India, xxv, 510; A Variety of *Butea frondosa*, xxvi, 305; On the Breeding of the Checkered Water Snake (*Tropidonotus piscator*), xxvii, 175; Cobra without the Cuneate Scale, xxvii, 175; Shakespeare on the Noble Art of Hawking, xxviii, 161; Deer Hunting in Shakespeare's Day, xxix, 217.

LUCKNOW PROVINCIAL MUSEUM—Appeal for Photographs, xxviii, 1113.

LUDHIANA—See BIRDS.

LUDLOW, F., I.A.R.O.—Notes on the Bird Life of Ahwaz, Persia, xxv, 303; A Good Head of the Goa or Tibetan Gazelle (*Gazella picticaudata*), photo, xxvii, 626; Notes on the Nidification of Certain Birds in Ladak, xxvii, 141.

MACKAY, BRIG.-GENERAL, H. R. A.—Large Carp from Mesopotamia, xxvi, 680.

MACLEOD, R. D., I.C.S.—A Fight between a Dog and a Porcupine, xxv, 491.

MACKENZIE, J. M. D., M.B.O. U., F.Z.S.—A List of Birds from the North Chin Hills, xxv, 72; Some Further Notes on Cuckoos in Maymyo, xxv, 742; A Few Notes on the Nests and Eggs of the Burmese Scimitar Babblers, xxv, 748; Nidification of the Small Streaked Spider-hunter (*Arachnothera aurata*), xxvi, 669.

MACNAUGHTEN, H.—On White Elephants, xxvi, 285.

MADRAS—See SNAKES.

MAGRATH, LT.-COL. H. A. F.—Large Pintail Sandgrouse (*P. a. caudacutus*) Settling on Water, xxv, 149; Crows in Busrah, xxv, 741; Sandgrouse in Mesopotamia, xxvi, 672; Kashmir Bird Notes, xxviii, 276.

MAHABLESHWAR--See BIRDS.

MAJOR, LT.-COL. F. F.—Exceptionally Large Saw-scaled Viper (*Echis carinata*), xxv, 308.

MAKRAN—See BOTANY.

MALABAR—See BIRDS.

MALLARD—See BIRDS.

#### MAMMALS (GEOGRAPHY)—

ARABIA—A New Arabian Hare, xxviii, 28.

MESOPOTAMIA—A New Species of Nesokia from — (*Nesokia buxtoni*), xxvi, 422; Some New Mammal from — xxvi, 745; Report on the Mammals of — collected by Members of the Expeditionary Force, 1915-1919, xxvii, 323; Hyænas in —, xxvii, 936; Notes on Mammals, xxviii, 474.

PERSIA—A Bat of the Genus *Rhinopoma* from S. E. — (*Rhinopoma pusillum*), xxvii, 25; Report on a Collection of Mammal made by Col. J. E. B. Hotson in Shiraz, —, xxvii, 573.

BALUCHISTAN—Some New Mammals from — and North-west India, xxvi, 933.

TIBET—Notes on Some Sheep shot in Ladak, xxviii, 1123; A Good Head of the Goa or Tibetan Gazelle (*Gazella picticaudata*), xxvii, 626.

KASHMIR—Large Kashmir Stag Head (*Cervus cashmirianus*) xxvi, 1038; Big Game Shooting in — and the Adjacent Hill Provinces, xxviii, 45; Part II, xxviii, 334; Part III, xxviii, 595; Part IV, xxviii, 874; Part V, xxix, 23; On the Forms of Himalayan Serow (*Capricornis sumatrensis*), xxix, 824; The Mammals and Birds of — and the Adjacent Hill Provinces, xxix, 879; xxx, 118; Part III, xxx, 253; Part IV, xxx, 509.

PUNJAB—The Occurrence of the Ermine in the Punjab, xxvii, 624; A Panther shot in Simla, xxix, 827; A Novel Method of shooting Bear in the 'Gallies,' xxix, 1049; A Few Days after Urial in the Punjab, xxx, 838.

NORTH-WEST FRONTIER PROVINCE—A Panther shoot beyond Chakrata, xxx, 217.

SIND—The Spiny Mouse of Sind, xxv, 205; The Record Sind Wild Goat (*Capra hircus blythi*), xxx, 699.

UNITED PROVINCES—Caracal (*Felis caracal*) and Hunting Leopard (*Cynelurus jubatus*) in Mirzapur, U. P., xxvi, 1041 ; A Sporting Trip to the Pindari Glacier, Part I, xxx, 42 ; Part II, xxx, 380.

ASSAM—Notes on a Takin Head from Assam, xxvi, 284 ; The Occurrence of the Stripe-backed Weasel (*Mustela strigidorsa*) in the Naga Hills, xxviii, 795 ; The Mishmi Takin (*Budorcas taxicolor*), xxix, 550 ; Elephant catching in Assam, xxix, 803 ; The Mishmi Takin, xxix, 830 ; Small Game Shooting in the Khasia Hills, xxx, 441 ; Tiger netting in —, xxx, 907.

BENGAL—A Collection of Mammals made by H. Stevens in the Darjeeling District, xxix, 90 ; A Tentative List of the Vertebrates of the Jalpaiguri District, —, Part I xxvi, 819 ; Part II, xxvi, 988 ; xxvii, 151.

CENTRAL INDIA—Notes on Big Game and Duck of Dhar State, xxvi, 841 ; Wild Animals in Central India, xxx, 694.

CENTRAL PROVINCES AND BEHARS—A Central Province Tiger, xxx, 459 ; The Hunting Leopard (*Cynelurus jubatus*), xxvii, 397 ; The Occurrence of Hodgson's Bat (*Myotis formosus*) in the Central Provinces, xxx, 905.

#### BOMBAY PRESIDENCY—

CUTCH—On the Rann of —, xxix, 274.

GUJARAT—Panther at Kharaghoda, Ahmedabad District, xxx, 218.

KATHIAWAR—Kathiawar Black Buck, xxv, 147 ; The Hunting Leopard (*Cynelurus jubatus*) in Kathiawar, xxvii, 398.

DECCAN—Field Rats in the Deccan in 1879, xxvi, 1042 ; Occurrence of the Tree Shrew (*Anathana wroughtoni*) at Khandala, Poona District, xxviii, 537.

#### MADRAS PRESIDENCY—

NILGIRIS—Nilgiri Trap for catching Wild Animals, xxvi, 311 ; Record Female Nilgiri Thar (*Hemitragus hylocrius*), xxvi, 666 ; Breeding Season of the Nilgiri Langur, xxx, 691.

MALABAR—The Slender Loris of Malabar, xxv, 45 ; Note on the—Slender Loris (*Loris lydekkerianus*), xxvi, 836 ; The Large Mammals of the Nelliampathy Hills, xxix, 553.

CEYLON—Notes on the Habits of Some — Bats, xxviii, 448 ; Some Notes on the — Gerbil, xxix, 214.

NICOBARS—Buffalo in the —, xxv, 491 ;

BURMA—Jackals in the Lower Burma, xxv, 146 ; Small Mammals from the Kachin Province, Northern Burma, xxvii, 499 ; Distribution of Serow in Burma, xxviii, 267 ; Wild Dogs in —, xxviii, 266 ; Some Observation of Birds and Mammals of Iman Bum, xxvii, 754.

SHAN STATES—A New ' Leaf Monkey ' from the Shan States, xxv, 46 ; The Shan State Langur—A Correction, xxv, 361.

TENASSERIM—The Tupaias of South Tenasserim, xxv, 199 ; The Tree Shrew (*Tupaia belangeri*), xxviii, 796.

SIAM—A journey to—and Back, Part I, xxix, 169 ; Part II, xxix, 378 ; Part III, xxix, 718 ; Part IV, xxix, 974 ; Part V, xxx, 418.

GENERAL—Distribution of the Different Races and Species of Takin (*Budorcas*), xxvi, 838; The Past and Present Distribution of the Lion in South-eastern Asia, xxvii, 33.

# MAMMALS (HABITS)—

PRIMATES.—Note on the Malabar Slender Loris (*Loris lydekkerianus*), xxvi, 836; The Slow Loris (*Nycticebus coucang*), xxx, 215; Birth of a White-handed Gibbon in Captivity, xxx, 456.

FELIDÆ OR CAT TRIBE—An Arboreal Panther, xxv, 148; Panthers, xxv, 266; The Tiger and the Train, xxvi, 658; Tiger (*Felis tigris*) climbing Tree, xxvi, 837; Tiger and Goat, xxvii, 163; Tigers in Trees, xxvii, 164; Tigers in Trees, xxvii, 383; Man-eating Tigers on Saugor Island in the Eighteenth Century, xxvii, 385; Notes on Panthers, xxvii, 394; Leopard Cat (*Felis bengalensis*) in Captivity, xxvii, 623; Notes on Panthers, xxvii, 935; Panther in Tree with a Pig, xxvii, 935; Panthers and Artificial Light, xxviii, 265; A Panther's Indifference, xxviii, 275; An Interesting Panther Incident, xxviii, 535; Notes on Man-eating Tigers, xxviii, 1124; Tiger climbing a Tree, xxix, 276; Notes on Tigers and their Calls, xxix, 548; Strange Behaviour of a Panther (*F. pardus*), xxix, 549; The 'Sambhar Call' of the Tiger, xxx, 462; The 'Sambhar Call' of the Tiger, xxx, 905; Panther and Wild Dogs, xxx, 910; A Central Provinces Tiger, xxx, 459; An Encounter with a Fighting Tiger, xxx, 652.

CANIDÆ OR DOG TRIBE—Natural Death of a Fox, xxvi, 660; Spotted Deer (*Axis axis*), and Wild Dogs (*Cuon dukhunensis*), xxvi, 661; Wild Dogs (*Cuon dukhunensis*) and Sambhar, xxvii, 837; Wild Dogs in Burma, xxviii, 266; Notes on Jackals (*Canis indica indica*), etc., in a Compound, xxviii, 1122; Jackals attacking a Spaniel in the Compound, xxviii, 122; In the Haunts of the Indian Wild Dog (*Cuon dukhunensis*), xxix, 1046; Indian Wild Dogs attacking a Bear, xxx, 218; Panther and Wild Dogs, xxx, 910; Effect of a Scorpion's Sting on a Terrier, xxviii, 274; Wild Dogs and Jungle Tragedies, xxx, 691; Panther and Wild Dogs, xxx, 910.

VIVERRIDÆ—MUNGOUSES, ETC.,—Mongoose (*Mungos mungo*) killing a Hedgehog, xxvi, 660; The Habits of the Grey Mongoose, xxviii, 274.

MUSTELIDÆ—MARTENS, ETC.,—Notes on a Young Hog-Badger, xxvi, 281; Some Notes on the Common Indian Otter, xxix, 275.

URSIDÆ—BEARS AND PROCYONIDÆ—CAT-BEARS—Tigress attacking Sloth Bear, xxvi, 659; A Large Bear (*U. labiatus*) shot near Guna, xxvii, 937; A Novel Method of shooting Black Bear in the 'Gallis', xxix, 1049; Indian Wild Dogs attacking a Bear, xxix, 218.

CHIROPTERA—BATS—Notes On the Habits of Some Ceylon Bats, xxviii, 448.

SCIURIDÆ—SQUIRRELS—The Indian Grey Squirrel (*Funambulus pennanti*), xxx, 467; Habits of the Brown Flying Squirrel (*Petaurista philippensis*), xxx, 460; The Woolly Flying Squirrel (*Eupetaurus cinereus*), xxx, 219.

MURIDÆ—RATS AND MICE, ETC.,—Food of the Grey Musk Shrew (*Crocidura cerulea*), xxvii, 164; Expected Plague of Field Rats in 1920, xxvii, 165; Some Notes on the Habits of the Ceylon Gerbil, xxix, 214.

LEPORIDÆ—HARES AND HYSTRICIDÆ—PORCUPINES.—A Fight between a Dog and a Porcupine, xxv, 491; Porcupine's Mode of Attack, xxvi, 282; Method of Porcupine's Attack xxvi, 283; Method of Porcupine's Attack, xxvi, 283; Porcupine's Method of Attack, xxvi, 1038; Porcupine's Method of Attack, xxvi, 1040; A Porcupine-Panther Incident, xxix, 550; Notes on Porcupines, xxix, 831.

ELEPHAS, EQUUS, RHINOCEROTIDÆ AND TAPIRIDÆ.—Panic in Elephants during an Earthquake, xxvi, 285; Duel between Two Bull Elephants, xxx, 912; On White Elephants, xxvi, 285; Twin Calf Elephants, xxvi, 628; The Breeding of Elephants in Captivity xxviii, 537; Corrugations on Elephant Tusks, xxviii, 1126; The Breeding of Elephants in Captivity, xxviii, 1128; Elephant catching in Assam, xxix, 803; Large Tusks of Indian Elephant, xxix, 1044.

BOVIDÆ—GAUR, TSAING, MITHAN, YAK, BUFFALO.—Buffalo in the Nicobar Islands, xxv, 491; An Old Time Buffalo Hunt, xxvii, 627; Notes on the Tsaine, xxviii, 540; A Rough and Tumble with an African Buffalo, xxx, 196; An Unusually Large Cow Gaur, xxx, 219; Tree Shrews, Tsine and Serow, xxix, 555.

OVIS—SHEEP—Notes on some Sheep shot in Ladak, xxviii, 1123; Notes on Oorial, xxviii, 1126; A Few Days after Urial in the Punjab, xxx, 838.

Markhor, SEROW, GORAL, TAKIN—Notes on the Goral (*Nemorhædus goral*), xxix, 552; The Mishmi Takin (*Budorcas taxicolor*), xxix, 550; Tree Shrews, Tsine and Serow, xxix, 555; The Mishmi Takin, xxix, 830.

GAZELLE, BLACK BUCK, NILGAI, ANTELOPE—Black Buck *vs.* Motor, xxvii, 938; Black Buck and Jackal, xxix, 1050.

CERVIDÆ—DEER—Spotted Deer (*Axis axis*) and Wild Dogs (*Cuon dukhunensis*). xxvi, 661; Wild Dogs and Sambhar, xxvi, 837; Large Kashmir Stag Head (*Cervus cashmirianus*), xxvi, 1038; Sore Neck in Sambhar, xxvii, 937; Double Growth of Horns in Sambhar, xxvii, 938; A Baby Hog-deer in Captivity xxviii, 271; Deer Hunting in Shakespeare's Day, xxix, 217; Horns of a very Old Muntjac or Barking Deer (*Cervulus grandicornis*) xxx, 221.

PANGOLIN—The Indian Pangolin (*Manis pentadactyla*), xxviii, 273; Notes on the Scaly Anteater (*Manis crassicaudata*), xxv, 148.

## MAMMALS—

HYBRIDS, VARIATIONS, COLOURATIONS—On the So-called Colour Phases of the Rufous Horse-shoe Bat of India (*Rhinolophus rouxi*, Temm.), xxv, 260; The Nomenclature of the Geographical Forms of the Panola Deer (*Rucervus eldi*) and its Relatives, xxv, 361; On White Elephants, xxvi, 285; Change of Coat of the Common Palm Squirrel—An Appeal, xxvi, 727; A White Tiger in Captivity, xxvii, 932; A Fresh Hypothesis in regard to Protective Colouration in Animals, xxix, 829; Change of Colour in Black Buck (*Antelope cervicapra*), xxix, 834; Colouration of Oorial (*Ovis vignei punjabiensis*), xxx, 220; Protective Colouration in Wild Animals, xxx, 470; A Black Jackal, xxx, 698; A Hybrid Black Buck and Chinkara, xxx, 911; Protective Colouration in Wild Animals, xxiv, 469.

**WEIGHTS AND MEASUREMENTS**—Measurements of Markhor and Urial Heads, xxv, 146; Kathiawar Black Buck, xxv, 147; Notes on a Takin Head from Assam, xxvi, 284; Size of Tigers, xxvi, 659; Record Female Nilgiri Thar (*Hemitragus hylocrius*), xxvi, 666; Large Kashmir Stag Head (*Cervus cashmirianus*), xxvi, 1038; Length of Tigers and Panthers, xxvii, 163; On the Method of measuring Tigers, xxvii, 391; Record Female Indian Gazelle, xxvii, 625; Some Splendid Black Buck Heads, xxvii, 626; A Good Head of the Goa or Tibetan Gazelle (*Gazella picticaudata*), xxvii, 626; Record Panther Skull (*F. pardus*), xxvii, 933; Measurement of Tigers and Panthers, xxvi, 936; A Good Female Chinkara Head (*Gazella bennetti*), xxviii, 266; Some Notes on the Horns of Thamin (*Cervus eldi*), xxviii, 268; Some Measurements of Big Game, xxviii, 543; The Measurements and Photography of Big Game, xxix, 209; The Record Black Buck Head (*Antilope cervicapra*), xxix, 555; Large Tusks of Indian Elephant, xxix, 1044; An Unusually Large Cow Gaur, xxx, 219; A Record Sind Wild Goat (*Capra hircus blythi*), xxx, 699.

**ABNORMALITIES**—Female Black Buck with Horns (*Antilope cervicapra*), xvii, 169; Abnormal Sambhar Horns, xxvii, 170; Double Growth of horns in Sambhar, xxvii, 938; Abnormal Ibex Head, xxviii, 544; Malformed Horns in the Cheetal (*Axis axis*), xxix, 1051; Horns of a very Old Muntjac or Barking Deer (*Cervulus grandicornis*), xxx, 221; Panther with Abnormal Feet, xxx, 909; Abnormal Clavicle Bones of a Tiger, xxx, 910.

**BREEDING**—The Breeding of Elephants in Captivity, xxviii, 537; The Breeding of Elephants in Captivity, xxviii, 1128; Birth of a White Handed Gibbon in Captivity, xxx, 456; Breeding Season of the Nilgiri Langur, xxx, 691.

**TRAPPING**—Nilgiri Trap for catching Wild Animals, xxvi, 311; Elephant catching in Assam, xxix, 803; An Elephant Trap, xxx, 912; Tiger netting in Assam, xxx, 907; Further Notes on Trapping, xxviii, 1129; Capturing Tigers with Bird-lime, xxv, 756.

**AGE**—On the Determination of Age in Bats, xxv, 249; Determination of age in Black Buck, xxx, 469.

**SCENT**—The Power of Scent in Wild Animals, xxvii, 112; Scent, xxvii, 164; The Power of Scent in Wild Animals, xxviii, 262.

## MAMMALS (SYSTEMATIC) —

**MAMMAL SURVEY OF INDIA, BURMA AND CEYLON**—A survey of Mammalian Fauna of India, Burma and Ceylon.

**REPORTS ON THE MAMMAL SURVEY COLLECTIONS**—(Nos. 27 to 37a incl.)  
—No. 27, Bhutan Duars, by R. C. Wroughton, xxv, 63; No. 28, Kalimpong (Darjeeling), by R. C. Wroughton, xxv, 291; No. 29, Pegu, by R. C. Wroughton and Winifred M. Davidson, xxv, 472; No. 30, Deccan, by R. C. Wroughton and Winifred M. Davidson, xxvi, 1025; No. 31, Nilgiris, by R. C. Wroughton and Winifred M. Davidson, xxvi, 1031; No. 32; Baluchistan, R. C. Wroughton, xxvii, 314; No. 33, High Wavy Mountains, Madura District, by R. C. Wroughton, xxvii, 545; No. 34, Travancore, by R. C. Wroughton, xxvii, 549; No. 35, Prome, by R. C.

Wroughton, xxvii, 553 ; No. 36 by Naga Hills, xxix, 221 ; No. 37, Nepal, by Martin A. C. Hinton and T. B. Fry, xxix, 399 ; No. 37(a) Nepal, by T. B. Fry, xxx, 525.

SCIENTIFIC RESULTS OF THE MAMMAL SURVEY—(No. xv—xliv incl.)

PRIMATES—The Slender Loris of Malabar, by, R. C. Wroughton, xxv, 45 ; A New 'Leaf Monkey' from the Shan States, by R. C. Wroughton, xxv, 46 ; The Shan States Langur—A Correction, by R. C. Wroughton, xxv, 361 ; On the Capped Langurs (*Pithecus pileatus blythi* and its allies), by Martin A. C. Hinton, xxix, 77.

CHIROPTERA (BATS)—

A New Bat of the Genus *Rhinopoma* from S. E. Persia, by Oldfield Thomas, xxvii, 25 ; A New Bat of the Genus *Myotis* from Sikkim, by Oldfield Thomas, xxvii, 248 ; The Geographical Races of *Scotomanus ornatus*, by Oldfield Thomas, xxvii, 772 ; On the Forms contained in the Genus *Harpiocephalus*, by Oldfield Thomas, xxix, 88 ; On the Genus *Tadarida* (Wrinkle-lip Bats), by R. C. Wroughton, xxvi, 731.

TUPAIAS—TREE SHREWS—The Tupaias of South Tenasserim, by Oldfield Thomas, xxv, 199 ; A New Tree Shrew, by R. C. Wroughton, xxviii, 599 ; On Tree Shrews from the Mergui Archipelago, by Oldfield Thomas, xxix, 84.

SORICULUS—SHREWS—Note on *Soriculus nigrecens* and its sub-species, by Martin A. C. Hinton, xxviii, 1052.

CARNIVORA—

MUNGOSES—A Renaming of *Mungos mungo elioti*, Wroughton ; by R. C. Wroughton, xxviii, 23 ; The Mongooses of the *Herpestes smithi* group ; by Oldfield Thomas, xxviii, 23.

CIVETS—*Paradoxurus niger* and *hermaphrodilus* of Blanford, by R. C. Wroughton, xxv, 48 ; A New Palm Civet from Assam, by R. C. Wroughton, xxvii, 600.

BADGERS—A New Ferret Badger (*Helictis*) from the Naga Hills, by Oldfield Thomas, xxviii, 432.

RODENTIA—

SCIURIDÆ—SQUIRRELS—

FUNAMBULUS—Two New Forms of the *Funambulus tristriatus* (group), by R. C. Wroughton and Winifred M. Davidson, xxvi, 728 ; Change of Coat in Common Palm Squirrel—An Appeal, by R. C. Wroughton, xxvi, 727.

GIANT SQUIRRELS—The Mainland representatives of *Ratufa m. dandolena*, by R. C. Wroughton, xxvii, 249 ; On the Large Squirrels of the *Ratufa gigantea* group, by Oldfield Thomas, xxix, 85.

COLLOSCIURUS—An Assam Representative of *C. castaneoventris* group of Squirrels, by R. C. Wroughton, xxvii, 661 ; On the *erythræus* group of Squirrels, by R. C. Wroughton, xxvii, 773 ; On Some Squirrels from the Mergui Archipelago, by Oldfield Thomas, xxix, 376.

GENERAL—Two New Rodents from the Mergui Archipelago, by Oldfield Thomas, xxviii, 1067.

MURIDÆ—RATS AND MICE—The Indian Gerbils or Antelope Rats, by R. C. Wroughton, xxv, 40; Notes on *Millardia* and its Allies, by Oldfield Thomas, xxv, 201; A New Genus of Muridæ, by Oldfield Thomas, xxv, 203; The Spiny-Mouse of Sind, by Oldfield Thomas, xxv, 205; Report on the House Rats of India, Burma and Ceylon, by Martin A. C. Hinton, xxvi, 59, 716, 906; A Synopsis of True Mice found within the Indian Empire, xxvi, 417; Notes on the Genus *Cheliones*, by Oldfield Thomas, xxvi, 726; Two New Species of *Calomyscus*, by Oldfield Thomas, xxvi, 938; On Jungle Mice from Assam, by Oldfield Thomas, xxvii, 596; Two New Rats from Assam, by Oldfield Thomas, xxviii, 26; The House Rats of Nepal, by Martin A. C. Hinton, xxviii, 1056; A New Mouse from Madura, S. India, by Oldfield Thomas, xxix, 87; On a New Field-Mouse, from Nepal, with a Note on the Classification of the Genus *Apodemus*, by Oldfield Thomas, xxix, 888; The Distribution and Geographical Races of the Gulan Bush Rats (*Golunda ellioti*), by Oldfield Thomas, xxix, 373.

LEPORIDÆ—HARES—A New Indian Hare (*Lepus rajput*), by R. C. Wroughton, xxv, 361.

PORCUPINES—The Porcupines of Assam, by Oldfield Thomas, xxviii, 431; The Brush-tailed Porcupine of Assam, by Oldfield Thomas, xxvii, 598.

#### CERVIDÆ—DEER—

TRAGULUS—MOUSE DEER—The Mouse Deer (*Tragulus*) of the Mergui Archipelago, by Oldfield Thomas, xxix, 84; The Nomenclature of the Geographical Forms of the Panola Deer (*Rucervus eldi*) and its Relatives, xxv, 361.

GENERAL—Some New Mammals from Baluchistan and North-western India, by Oldfield Thomas, xxvi, 933; New and Interesting Mammals from the Mishmi Hills, by Oldfield Thomas, xxviii, 428; The Synonymies, Characters and Distribution of the Maccaques included under the name *rhesus* and *assamensis* in Blanford's Mammals, xxvii, 665; On the Nomenclature of the South Indian Long-tailed Maccaques, xxvii, 813; Notes on the Nomenclature of the Northern Slow Loris, xxviii, 433.

SUMMARY OF THE RESULTS FROM THE INDIAN MAMMAL SURVEY—(PARTS I—VII WITH APPENDIX X); Part I, xxv, 547; Part II, xxvi, 19; Part III, xxvi, 338; Part IV, xxvi, 776; Part V, xxvi, 955; Part VI, xxvii, 57; Part VII, xxvii, 301; Appendix, xxvii, 520.

#### MAMMALS—(GENERAL)—

Notes on the Oriental Sporting Magazine, New Series, 1869-1879, xxv, 491, 740; Panic in Elephants during an Earthquake, xxvi, 285; The Tiger and the Train, xxvi, 659; Arrow Head imbedded in Tiger's Back, xxvi, 658; Natural Death of a Fox, xxvi, 660; Notes on the Oriental Sporting Magazine, June 1828 to June 1833, xxvi, 1047; The Power of Scent in Wild Animals, xxvii, 112; Scent, xxvii, 164; Food of the Grey Musk Shrew (*Crocidura cerulea*), xxvii, 164; Expected Plague of Field Rats in 1920, xxvii, 165; A Sporting Diary, xxvii, 386; An Old Time Buffalo Hunt, xxvii, 627; Man-eating Monkeys and Poisonous Locusts, xxvii, 629; Sore Neck in Sambhar, xxvii, 937; Black-Buck *vs.* Motor, xxvii, 938; Quaint Beasts and Queer Habits, xxviii, 204; The Food of

the Small Indian Civet (*Viverricula malaccensis*) in Captivity, xxviii, 265 ; Effect of Scorpion Sting on a Terrier, xxviii, 274 ; In Lighter Vein, xxviii, 524 ; Notes on Lydekker's 'Game Animals of India', xxviii, 529 ; Editors' and Readers' Comments on Notes which appeared in previous numbers, xxviii, 533 ; Folklore of Birds and Beasts in India, xxviii, 562 ; H. R. H. The Prince of Wales' Shoots in India 1921-22, xxviii, 675 ; xxviii, 1091 ; Editors' and Readers' Comments on Articles and Notes which have appeared in previous numbers, xxviii, 786 ; Jungle Notes, xxviii, 792 ; The Indian Lion, xxviii, 795 ; Four-horned Fat-tailed Sheep, xxviii, 798 ; Sore-Neck in Sambhar, xxviii, 1125 ; Corrugations on Elephant Tusks, xxviii, 1125 ; Effect of Storm on Animals, xxviii, 1126 ; Deer Hunting in Shakespeare's Days, xxix, 217 ; The Preservation of Shikar Trophies, xxix, 265 ; Some Natural History Notes connected with The Prince of Wales' Tour in India, xxix, 271 ; Supposed Occurrence of the Ermine in India, xxix, 277 ; Notes on the Goral (*Nemorhædus goral*), xxix, 552 ; Animal Life on the Gauges, xxix, 633 ; On the Forms of Himalayan Serow (*Capricornis sumatrensis*), xxix, 824 ; 'Readers' Comments on previous Notes and Articles, xxix, 1044 ; A Rough and Tumble with an African Buffalo, xxx, 196 ; Reply to Criticisms on the Book of Wild Animals in Central India, xxx, 209 ; A Very Fearful Place, xxx, 464 ; Hunting with Caracal in the Seventeenth Century, xxx, 466 ; Wild Dogs and Jungle Tragedies, xxx, 691 ; Tiger killed by a Cobra, xxx, 705 ; Duel between two Bull Elephants, xxx, 912 ; The Adjutant Bird and Other Matters, xxviii, 287.

MAMMAL SURVEY, PROGRESS OF—xxvi, 656.

MANAVALARAMANUJAM, S. G.—Occurrence of the Galeod Spider (*Rhagodes nigrocinctus*) in the South Arcot District, Madras Presidency, xxviii, 814.

MANIPUR—See BIRDS.

MANSON, C. E. FELLOWS—The Life-history of Rare and Little Known Sphingidæ (Hawk Moths) of the Oriental Region, xxvii, 745 ; New Localities for Rare and Little-known Sphingidæ, xxvii, 964.

MARKHOR—See MAMMALS.

MARRYAT, N.—Note on the Occurrence of the Lesser Florican or Likh (*Sypheotis aurita*) in Bombay, xxvi, 674.

MARSHALL, A. H.—Occurrence of the Pink-headed Duck (*Rhodonessa caryophyllacea*) in the Punjab, xxv, 502.

MARSHALL, DR. H.—List of Mollusca of Rangoon, xxviii, 773.

\*MARTIN, S. J.—A Note on the Large Brown Thrush (*Zoothera monticola*), xxvi, 668.

MATHEWS, W. H.—Birds Nesting in the Bhilling Valley, Tehri Garhwal, xxv, 495 ; Note on the Indian Long-billed Vulture (*Gyps indicus*), xxvi, 287 ; Nesting Habits of the Brown Rock-chat (*Cercomela fusca*), xxvi, 843 ; Albino Swallow, xxvi, 844 ; Different Birds nesting in Company, xxvi, 853.

MAWSON, MRS. N.—Breeding Habits of the Green Turtle (*Chelonia midas*), xxvii, 955.

MAYMYO—See BIRDS.

McARTHUR, A. G.—Notes on Panthers, xxvii, 935 ; A Python's Long Fast, xxviii, 1142.

McCANN, C.—On the Breeding Habits of Some Myriapods, xxvi, 303 ; Some Notes on the Common Indian Otter (*Lutra lutra*), xxix, 275 ; A Note on the Habits of the Large-scaled Earth Snake (*Silybura macrolepis*), xxix, 1062.

McCONNELL, LIEUT. R. A. H.—Sore-Neck in Sambhar, xxviii, 1125.

McRAE, W.—A New Species of Phytophthora Parasite on Para Rubber Tree, xxv, 760

MEAD—See OBITUARY.

MEREDITH, H. R.—Feeding Habits of the Little Egret (*Herodias garzetta*), xxvi, 852 ; Egret and Lizard, xxvii, 172.

MESOPOTAMIA—See FISH, LIZARDS, SNAKES, BIRDS, INSECTS, MAMMALS.

MHOW—See BIRDS.

MILLARD, W. S.—Food of the Grey Musk Shrew (*Crocidura caerulea*), xxvii, 164 ; Expected Plague of Field Rats in 1920, xxvii, 165.

MILLER, A. C.—' Man-eating ' Monkeys and Poisonous Locusts, xxvii, 629.

MILLETT, H. J. C., I.F.S.—A Panther's Indifference, xxviii, 275.

MILLNER, C. E.—Wild Dogs in Burma, xxviii, 266 ; Distribution of Serow in Burma, xxviii, 267.

MILNER, J.—Burmese Races of Serow, xxviii, 534.

MILLS, J. P., I.C.S.—Notes on a Takin Head from Assam, xxvi, 284 ; Wild Dogs in Burma, xxviii, 534 ; The Mishmi Takin, xxix, 551.

MILROY, A. J. W.—Elephants Catching in Assam, xxix, 80.

MIRZAPUR—See BIRDS.

MITCHELL, F. G.—Notes on Flies for Trout Fly-fishing in Kashmir, xxv, 757, Method of Porcupine's Attack, xxvi, 283 ; How Trout were Introduced into Kashmir, xxvi, 295.

MOLESWORTH, A. L.—Measurements of Makhor and Urial Heads, xxv, 146.

MOLESWORTH, COL., C.I.E., C.B.E., V.H.S., I.M.S.—Trout Culture on the Nilgiris (plates), xxvii, 898.

MOLLUSCA.—Food of the Snail *Indrella ampuli*, xxviii, 557 ; List of—Rangoon, xxviii, 773 ; Note on the Operculum of the Turban-shell, xxviii, 1143.

MOLONEY, CAPT. J. B., I.M.S.—Note on a Case of Recovery after a Bite by a Russell's Viper, xxvii, 644.

MONTEATH, G., I.C.S.—Tiger (*Felis tigris*) Climbing Tree, xxvi, 837.

MONTEATH, J., I.C.S.—Catching Crocodiles (photo), xxix, 300.

MORICE, F. D., M.A., F.Z.S.—Annotated List of Aculeate Hymenoptera (except Heterogyna) and Chysids recently collected in Mesopotamia and North-west Persia, xxvii, 816 ; xxviii, 192.

MORRIS, RANDOLPH C.—Porcupine's Method of Attack, xxvi, 1040 ; Panthers and Artificial Light, xxviii, 789.

MOSSE, MAJOR, A. H., I.A.—On the Rann of Cutch (plates), xxix, 274.

MUGGER—See CROCODILE.

MUNGOOSE—See MAMMALS.

MUSCAT—See BIRDS.

MUSEUM—PRINCE OF WALES —Scheme for Arrangement of the Collections of the Bombay Natural History Society in the——of Western India, xxvii, 917 ; The Progress of the Natural History Section in the——, xxviii, 777 ; Report on the Progress and condition of the Natural History Section,——for the year ending March 31, 1924, xxx, 495 ; Notes on a Visit to Certain Museums in Great Britain, xxix, 456.

MUSSOORIE—See BOTANY.

NAGA HILLS—See MAMMALS.

NAINI TAL—See INSECTS, BUTTERFLIES.

NARAYAN, VICTOR N.—Notes on Man-eating Tigers, xxviii, 1124.

NELLIAMPATHY—See BIRDS, MAMMALS.

NEWNHAM, LT.-COL. A., I.A. (*Retd.*)—Curious Case of Protective Mimicry in a Caterpillar, xxviii, 962.

NILGIRIS—See FISH, SNAKES.

NURSE, LT.-COL. C. G.—New and Little Known Bombyliidæ. Part I, xxviii, 630 ; Part II, xxviii, 883.

O'BRIEN, LT.-COL. E.—Mongoose (*Mungos mungo*) killing a Hedghog, xxvi, 660, Indian Grey Shrike (*Lanius lahtora*) attacking wounded Sandgrouse, xxvi, 667 ; Method of Porcupine's Attack, xxvi, 283 ; The Effect of a Scorpion's Sting on a Terrier, xxviii, 274 ; Nidification of the Black or Indian King Vulture (*Otogyys calvus*), xxxiii, 284 ; The Food of the Shikra (*Astur badius*), xxviii, 807 ; The Common Bee-eater (*Merops viridis*), xxviii, 1130 ; Folklore of Birds and Beasts of India, xxviii, 1149 ; Cobra going down a hole, tail foremost, xxix, 303.

#### OBITUARY NOTICES—

Rev. F. Dreckman, s.J. and Lt.-Col. K. R. Kirtikar, I.M.S., xxv, 293 ; F. Hannington, I.C.S., E. W. Ellis, I.F.S., xxvi, 1037 ; Francis Milburn Howlett, xxvii, 622 ; Robert Charles Wroughton, xxvii, 929 ; John Wallace, C.E., xxviii, 259 ; Lt.-Col. L. L. Fenton, xxviii, 519 ; Dr. Henry Neville Coltart, xxix, 266 ; H. J. Elwes, F.R.S., xxix, 267 ; P. J. Mead, G.S.I., C.I.E., I.C.S., xxix, 545 ; A. M. Primrose, xxix, 546 ; John Duncan Inverarity, xxix, 822 ; Col. Charles Swinhoe, M.A. (Oxon), F.L.S., F.Z.S., F.E.S., xxix, 1042 ; Nelson Annandale, xxx, 213 ;

- Surgeon-General W. B. Bannerman, C.S.I., M.D., I.M.S., xxx, 455;  
 Prof. H. Maxwell Lefroy, Prof. F. Hallberg, Mr. L. J. Sedgwick, I.C.S.,  
 xxx, 899.
- O'DONEL, H. V., M.B. O.U.—See INGLIS, CHAS. M., F.Z.S. xxvii, 151.
- OLLENBACH, G. C.—Occurrence of *Stichopthalma godfreyi* Roths, xxvi, 867; Notes on the Habits of Butterflies (*Zeuxidia masoni* and *Xanthotenia busiris*), xxvi, 869; A List of the Butterflies collected in the Tavoy District, Burma (plates), xxvii, 883; xxviii, 123.
- OLIVER, MAJOR D. G.—Spot-bill Duck in Kashmir, xxvi, 675.
- OMER-COOPER, JOSEPH.—The Terrestrial Isopoda of Mesopotamia and Surrounding Districts (plates), xxix, 93.
- OOKHA BHIL—Obituarial Notice of, xxix, 268.
- OOTACAMUND—See BIRDS, shooting.
- OSMASTON, A. E.—A Note on the Nidification and Habits of Some Birds in British Gharwal (plates), xxvii, 140.
- OSMASTON, B. B., I.F.S.—Further Notes on Birds Nesting in the Tons Valley, xxv, 493; Further Notes on Indian Nightjars, xxvii, 948; The White-spotted Fantail Flycatcher (*Rhipidura pectoralis*), xxviii, 282; The Crested Swift (*Macropteryx coronata*), xxviii, 283; Birds of Pachmarhi (plates), xxviii, 453; Predaceous Habits of the Common King-crow, xxviii, 546; The Occurrence of the Blue-bearded Bee-eater (*Nyctiornis athertonii*) in the C. P., xxviii, 805; Woodpecker occupying Nesting Box, xxviii, 1137; Supposed Occurrence of the Ermine in India, xxix, 277; Bird Life in Gulmarg (plate), xxix, 493; The Trinomial System of Nomenclature as applied to Indian Birds, xxix, 556; Supplementary on Some Indian Birds, xxvi, 424; The Shikra (*Astur badius*), xxix, 560.
- OTTER—See MAMMALS.
- PADDISON, R. H.—Note on the Goral (*Nemorhædus goral*), xxix, 552.
- PACHMARHI—See BIRDS systematic.
- PANTHERS—See MAMMALS, shooting.
- PARKER, R. N., I.F.S.—Insect Living in the Snow at 14,000 ft, xxvii, 639.
- PARR, B. R.—Malformed Horns in Cheetal (*Axis axis*), xxix, 1051.
- PATTERSON, LT.-COL. J.—An Unusual Swarm of Moths, xxviii, 814.
- PAUR, H. H. UDAJI RAO, K.C.S.I., K.B.E., MAHARAJA OF DHAR—Notes on the Big-Game and Duck of Dhar State, xxvi, 841.
- PATVARDHAN, G. B.—Phenomena of Interchangeability of Vegetative and Fruit Structures in *Opuntia elatior*, Mill. (plates), xxv, 573; A Sport Form of *Opuntia elatior*, Mill., xxv, 514.
- PEGU YOMAS—See BUTTERFLIES.
- PEILE, LT.-COL. H. D., F.E.S., I.M.S.—The Butterflies of Mesopotamia, Part I, xxviii, 50; Part II, xxvii, 345; Notes on Eucloë, xxvii, 1145;

The Packing of Papered Butterflies for Safekeeping or Delivery by Post, xxv, 309.

PERSIA—See SNAKES, BIRDS, INSECTS, MAMMALS.

PERSIAN GULF—Phosphorescence in, xxv, 512.

PESHAWAR—See BIRDS, Geography.

PHILLIPS, W. W. A.—Notes on the Habits of Some Ceylon Bats, xxviii, 448 ; Further Notes on Some Ceylon Bats, xxix, 154 ; Some Notes on the Habits of the Ceylon Gerbil (*Tatera ceylonica*), plate, xxix, 214.

PHOSPHORESCENCE—In the Persian Gulf, xxv, 512.

PITMAN, MAJOR C. R. S., D.S.O., M.C., M.B.O.U.—Notes on Mesopotamian Mammals, xxviii, 474 ; The Haunts of the Red Indian Wild Dog (*C. dukhunensis*), xxix, 1046 ; Porcupine's Method of Attack, xxvi, 1039 ; Notes on Porcupines, xxix, 831 ; A Novel Method of Shooting Black Bear in the 'Gallis', xxix, 1049 ; A Rough and Tumble with an African Buffalo, xxx, 196.

PITTA—See BIRDS.

PORCUPINE—See MAMMALS.

POWAR, G. B.—A Good Female Chinkara Head (*G. bennetti*), xxvii, 266.

PRATER, S. H.—Notes on some Interesting Snakes recently presented to this Society, xxvi, 683 ; Progress of the Mammal Survey, xxvi, 656, 1036 ; Occurrence of Theobald's Kukri Snake (*Simotes theobaldi*) in Assam, xxvii, 175 ; The Arabian Ostrich, xxvii, 602 ; An Old Time Buffalo Hunt, xxvii, 627 ; Record Panther Skull (*F. pardus*) (plate), xxvii, 933 ; On Some Unusual Contributions to the Society's Museum, xxvii, 966 ; Nest-boxes for Birds (plates), xxvii, 460 ; Notes on Two Young Indian Horn-bills (plate), xxviii, 550 ; The Tsaine, xxviii, 786 ; Food of the Fat-tailed Lizard (*Eublepharis macularius*), xxviii, 811 ; Notes on a Visit to Certain Museums in Great Britain, xxix, 456 ; The Occurrence of the White-headed Black Bulbul (*Hypsipetes lucocephalus*) within Indian Limits, xxix, 559 ; The Slow Loris (*Nycticebus coucang*), xxx, 215.

PRATER, S. H. AND SPENCE, R. A.—The Fish Supply of Our West Coast, (plate), xxix, 482 ; The Record Black-Buck Head (*Antelope cervicapra*), plate, xxix, 555.

PRIDEAUX, F. W. A.—Late Stay of Pintail (*Dafila acuta*) in the Central Provinces, xxix, 839.

PRIMROSE—See OBITUARY.

PRIMROSE, A. M.—The Spine-tailed Swift (*C. indica*) and the Burmese Swift (*C. pacificus*) in Assam, xxvii, 631 ; Notes on the Habits of (*Anthraceros albirostris*) the Indo-Burmese Pied Hornbill, in confinement, xxvii, 950 ; Angling for *Barbus hexagonolepis* in Assam, xxvii, 957.

PRIMROSE, C.—The Tenasserim Tree Shrew (*Tupaia belangeri*), xxvii, 796 ; Further Notes on Trapping, xxviii, 1129.

- PROCEEDINGS—xxv, 157, 314, 516-520, 766.  
 xxvi, 313-318, 698-703, 882, 1053.  
 xxvii, 185, 410, 646, 968.  
 xxviii, 301, 556, 817  
 xxix, 570, 849, 1065.  
 xxx, 232, 505, 715, 926.
- PROCTOR, Miss JOAN B., F.Z.S.—Further Lizards and Snakes from Persia and Mesopotamia, xxvii, 251 ; See INGOLDBY, CAPT. C. M., xxix, 117.
- PROUT, LOUIS B.—Moths of Mesopotamia and N. W. Persia, xxviii, 187.
- 'PSEUDO COLLECTOR'—In Lighter Vein, xxvii, 524.
- PYTHON—See SNAKES.
- QUAIL—See BIRDS.
- QUETTA—See BIRDS.
- RANGACHARI, K.—See TADULINGAM.
- RAO, C. R. NAYARAN—Notes on the Russell's Viper, xxv, 307 ; Some South Indian Batrachians (plates), xxvii, 119 ; Notes on Batrachia, xxviii, 439 ; Notes on a Collection of Batrachia from S. Waziristan, xxix, 131.
- RAO, M. K. VENKATA—Note on the Colour of Flowers in *Dysophylla stellata*, Bth., xxv, 312 ; An Interesting Case of Distribution, xxv, 313.
- RAO, S. P. JIVANA, M.A.—An Anomaly in Floral Biology, xxvi, 1049.
- RAWALPINDI—See BIRDS.
- REBEIRO, JAYME, L.C.E.—The Geology of Worli Hill (plates), xxvii, 582 ; A Mango Tree (*M. indica*) flowering in August, xxvii, 645.
- RENDALL, H. D., I.C.S.—Kathiawar Black Buck, xxv, 147.
- REPORT OF THE COMMITTEE OF THE BOMBAY NATURAL HISTORY SOCIETY—xxvii, 371 ; xxviii, 1111.
- REVIEWS—Shikar Notes for Novices, xxvii, 616 ; A Naturalist in Himalaya, xxvii, 911 ; Zoology for Secondary Schools in India, xxvii, 912 ; Small Game Shooting around Ootacamund, xxviii, 254 ; The Water-fowl of India and Asia, xxviii, 254 ; Zoology—A Text-book for Colleges and Universities xxviii, 518 ; The Edge of the Jungle, xxviii, 780 ; Indian Game Birds, xxviii, 1114 ; Fauna British India, Birds, vol. i (2nd edition), xxix, 261 ; The Common Birds of India, xxix, 538 ; The Ferns of Bombay, xxix, 540 ; Flora Simlensis, xxix, 540 ; Indian Bird Life, xxix, 541 ; A Naturalist in Hindustan, xxix, 812 ; A Biology of the British Hemiptera Heteroptera, xxix, 812 ; Manual of Entomology, xxix, 812 ; Indian Earthworms, xxix, 813 ; A Survey of the Fauna of Iraq, xxix, 815 ; Butterfly Lore, xxix, 1031 ; A Bibliography of Fishes, xxix, 1031 ; Wild Animal in Central India, xxix, 1032 ; Himalayan and Kashmiri Birds, xxix, 1036 ; The Fauna of British India, Birds, vol. ii (2nd edition), xxx, 201 ; Practical Handbook of British Birds, xxx, 201 ; A Guide to the Birds of Europe and North America, xxx, 202 ; Butterflies of India, xxx, 203 ; Proceedings of the Fifth Entomological Meeting, Pusa, February, xxx, 204 ; Animal Life in Deserts,

xxx, 205 ; Fauna of the Siju Cave, Assam, xxx, 205 ; The Birds of Sind, xxx, 446 ; The Birds of Africa, xxx, 447 ; Wild Fowl of the World, xxx, 449 ; The Butterflies of Ceylon, xxx, 450 ; How to identify Snakes of India, xxx, 451 ; In the High Himalayas, xxx, 686 ; A General Text-book of Entomology, xxx, 687 ; The Protection of Birds, xxx, 894 ; A Monograph on the Birds of Prey, Part I, xxx, 894 ; Nature at the Desert's Edge, xxx, 896 ; Familiar Flowering Trees in India, xxx, 898.

RHE-PHILIPPE, G. V. DE., F.E.S.—The Butterflies of Lahore, xxv, 136.

RICHARDS, B. D.—Note on the Habits of the Checkered Water Snake (*Tropidonotus piscator*), xxv, 150 ; Food of Bulbuls, xxv, 503.

RIDLAND, J. G.—Arrow Head imbedded in a Tiger's Back, xxvi, 658.

RIEU, J. L.—Cruelty to Wild Fowl, xxix, 296.

RILEY, CAPT. N. D., F.E.S., F.L.S.—Notes on the Generic Names of Indian *Theclinae* and *Amblypodinae* (Lep. Rhop.), xxviii, 465.

RISHWORTH, H. R.—Libellulines at St. Thomas' Mount, Madras, xxvi, 685.

ROBINSON, S. M., M.B.O.U.—Notes of Mrs. Gould's Yellow-backed Sunbird (*Æthopyga gouldiæ*), xxix, 1052 ; Nesting of Walden's Yellow-backed Sunbird (*Æthopyga sanguinipecta*), xxix, 1053 ; Maternal Instinct in the Pied Bush-chat (*Pratincola caprata*), xxvi, 843.

RODGERS, C. GILBERT—Large Kashmir Stag Head (*Cervus cashmirianus*), xxvi, 1038.

ROKEBY, B. A.—Comment on the Colour-change of the Black-Buck (*Antelope cervicapra*), xxix, 836.

ROLL OF HONOUR—xxv, 145.

ROOS-KEPPEL, THE HON'BLE SIR GEORGE, G.C.I.E., K.C.S.I.—Occurrence of the European Great Bustard (*Otis tarda*) near Peshawar, xxv, 745.

ROSTAND.—A Panther Shoot in Simla, xxix, 827 ; Flighting on a Delhi Jheel, xxix, 1059.

ROTHSCHILD, LORD—Moths of Mesopotamia and N. W. Persia, xxviii, 170.

RUBIE, C. B.—Snipe Shooting in Sind, xxix, 298.

RUSSELL, HAROLD, F.Z.S., F.L.S.—On Indian Parasitic Flies, Part I, xxviii, 370 ; Part II, xxviii, 703 ; Part III, xxviii, 957.

RUSSELL'S VIPER—See SNAKES.

RUTTLEDGE, R. F.—Range of the Tufted Pochard (*Fuligula fuligula*), xxix, 839.

SALSETTE—See BIRDS.

SALT RANGE—See BIRDS.

SAMBHAR—See MAMMALS.

SANDGROUSE—See BIRDS.

SAUGOR ISLAND—See MAMMALS.

SAVILE, L. H.—The Barton Shooting Seat (plate), xxv, 515.

SAW-SCALED VIPER—See SNAKES.

SCENT—See MAMMALS.

SCOTT, MAJOR T. B., I.A.,—Notes on the Larva of *Dilephila livornica* (Striped Hawk Moth), xxv, 156; Notes on the Larva of *Cherocampa alecto*, xxv, 299; The Hawk Moth (*Dilephila livornica*), A Correction, xxv, 872; A New Hawk Moth, xxv, 177.

SEA—On Red Sea Water, xxv, 761.

SEDGWICK, L. G., F.L.S., I.C.S.—Herbaceous Monsoon Flora at Castle Rock and a New Species of Balsam, xxv, 482; The Ceyperaceæ of the Bombay Presidency, Part I, xxv, 682; Part II, xxvi, 192; Fall of Seed in a Rainstorm, xxv, 764; *Eleocharis congesta*, Don., in the Bombay Presidency, xxvi, 312; Reduction of *Euphorbia rothiana*, xxv, 599.

SEROW—See MAMMALS.

SEWELL, MAJOR R. B. SEYMOUR, I.M.S., B.A., F.A.S.B.—A Survey Season in the Nicobar Islands on the R. I. M. S. Investigation, October 1921 to March 1922 (plates), xxviii, 970.

SHEBBEARE, E. O., I.F.S.—See INGLIS CHAS, xxvii, 151.

SHEMBAGANUR—See SNAKES.

SHEPHARD, T. F. G.—Southern Range of the Mallard (*Anas boscas*) xxix, 1052.

SHIKRA—See BIRDS.

SHIPP, W. E.—Curious Nesting Site chosen by the Purple Honey-sucker (*Arachnechthra asiatica*), xxviii, 1136.

SHORTT, W. H. O.—A Few Hints on Crocodile Shooting (plates), xxviii, 76.

SHUTTLEWORTH, LT.-COL. A. R. B.—Some Curious Nesting Places, xxviii, 285.

SIAM—See MAMMALS, BIRDS.

SIKKIM HIMALAYAS,—See BIRDS, SYSTEMATIC.

SIMLA—See BIRDS.

SIMONDS, MAJOR M. H.—Change of Colouration in Black Buck (*Antelope cervicapra*), xxix, 834.

SLATER, A. F. M.—Late Stay of Pintail Snipe (*Gallinago stenura*) in Burma, xxvi, 850.

SMITH, MALCOLM A., F.Z.S.—Remarks on Col. Wall's Identification of *Hydrophis cyanocincta*, xxvi, 682.

SNAIL—See MOLLUSCA.

SNAKES—(GEOGRAPHY) —

KASHMIR, NORTH-WEST FRONTIER PROVINCES AND PUNJAB—Notes on a Collection of Reptiles from Waziristan and the Adjoining Portion of the N. W. Frontier Provinces, xxix, 117.

UNITED PROVINCES, CENTRAL INDIA AND THE CENTRAL PROVINCES—Occurrence of Russell's Earth Snake (*Eryx conicus*) at 2,200 ft. altitude in the C. P., xxv, 151; The Bronze-backed Tree Snake (*Dendrelaphis tristis*) in Central India, xxv, 306; The Bronze-backed Tree Snake in the Central Provinces, xxv, 306; Occurrence of the Bronze-backed Tree Snake (*Dendrelaphis pictus*) in Kumaon, xxv, 509.

BENGAL, BIHAR AND ORISSA.—A Tentative List of the Vertebrates of the Jalpaiguri District, Bengal, Part I, xxvi, 819; Part II, xxvi, 988; Part III, xxvii, 151.

ASSAM—Occurrence of Theobald's Kukri Snake (*Simotes theobaldi*) in Assam.

BOMBAY PRESIDENCY.—Note on the Hamadryad or King Cobra (*Naia bungarus*) in North Kanara, xxv, 151; The Snakes of Bombay Island and Salsette, xxx, 151.

MADRAS PRESIDENCY—Notes on a Collection of Sea-snakes from Madras, xxv, 599; Notes on a Collection of Snakes from the Nilgiri Hills and the Adjacent Wynaad, xxvi, 552; Notes on a Collection of Snake from Shembaganur, Palni Hills, xxix, 388; Notes on a Collection of Snake from Shembaganur, Palni, Hills, xxviii, 1139.

BURMA—Two New Burmese Snakes, xxx, 587; A New Snake from Burma, xxx, 734; Notes on Snakes collected in Burma in 1924, xxx, 805.

MESOPOTAMIA—A List of the Snake from Mesopotamia collected by the Members of the Mesopotamian Expeditionary Force, 1915-1919, xxvii, 347; Further Lizards and Snakes from Mesopotamia, xxviii, 251.

PERSIA—Description of a New Snake of the Genus *Contia*, B. & G. from Persia, xxvi, 1024; Description of a New Snake of the Genus *Zamenis* from Persia, xxvii, 251.

SNAKES—Habits—Note on the habits of the Checkered Water Snake (*Tropidonotus piscator*), xxv, 150; Feeding Habits of the Python (*Python molurus*), xxv, 150; Notes on the Russell's Viper, xxv, 307; The Habits of *Dryophis mycterizans*, xxvi, 681; The Habits of the Green Whip Snake (*Dryophis mycterizans*), xxvi, 862; An Encounter with a Hamadryad (*Naia bungarus*), xxvii, 955; An Aggressive Phoorsa (*Echis carinata*), xxviii, 291; A Python's Long Fast, xxviii, 1142; A Python's Meal, xxix, 566; A Note on the Habits of the Large-sealed Earth Snake (*Silybura macrolepis*), xxix, 1062; Python and Monitor, xxx, 229; Python attacking a Spaniel, xxx, 485; Boa Constrictor *vs.* Alligator, xxx, 587; Viper and White-throat, xxx, 707.

BREEDING AND GESTATION—Pythons Breeding in Captivity, xxv, 509; Notes on a Gravid *Hydrophis cyanocinctus* and her brood, xxv, 754; Notes on the Breeding of the Rasp-skinned Water Snake (*Chersydrus granulatus*, Schneider), xxv, 756; A Gravid Specimen of the Snake *Cylindrophis maculatus*, Linn., xxvi, 863; On the Breeding of the Checkered Water

Snake (*Tropidonotus piscator*), xxvii, 175; Hatching of Cobras (*Naia tripudians*) with Remarks on the Oodont, Genitalia, etc., xxviii, 553; Notes on the Russell's Viper, xxv, 307; Notes on an Interesting Specimen of the Sea-Snake *Hydrophis cerulescens*, xxv, 308.

SIZE—Exceptionally Large Saw-scaled Viper (*Echis carinata*), xxv, 308.

COLOUR AND VARIATION—Cobra without the Cuneate Scale, xxv, 510; On an Undescribed Colour Variety of the Snake *Zaocys mucosus* from Central India, xxv, 753; A 17-scale Krait (*Bungarus ceruleus*) from Bangalore, xxvi, 1046; Cobra without the Cuneate Scale, xxvii, 175; Varieties of Cobras in Central India, xxv, 510.

SNAKE-BITE—The Bite of the Larger Spotted Viper (*Lachesis monticola*) xxvi, 681; A Note on a Case of Bite by a Russell's Viper treated with Anti-venine intravenously, xxvii, 643; Note on a Case of Recovery after a Bite by a Russell's Viper, xxvii, 644; Notes on the Effect of the Bite of McMahon's Viper (*E. mcmahoni*), xxx, 485; Recovery from the Bite of a Common Krait (*B. candidus*), xxx, 487; Tiger killed by a Cobra, xxx, 705; Record of a Death from Bite of Hamadryad or King Cobra (*Naia hanna*), xxx, 706; Recovery from the Bite of *Echis carinata*, xxx, 706.

#### SNAKES (SYSTEMATIC)—

DESCRIPTIONS AND LEPIDOSIS—The Rudimentary Hind Limbs in an Embryo of Python, xxvi, 862; Note on the Snake *Trirhinopholis nuchalis*, Boulenger, xxvi, 863; Description of a New Snake of the Genus *Contia*, B. & G., from Persia, xxvi, 1024; A 17-scaled Krait (*Bungarus ceruleus*) from Bangalore, xxvi, 1046; Suppression of the Name of the Snake described by me as *Oligodon evansi*, xxvii, 175; Description of a New Snake of the Genus *Zamenis* from Persia, xxvii, 251; New Snake of the Family *Uropeltidae*, xxvii, 41; The Hamadryad or King Cobra (*Naia hanna*, Cantor), xxx, 189; Two New Burmese Snakes, xxx, 587; A New Snake from Burma, xxx, 734; The Snake (*Natrix venningi*), Venning's Keelback, xxx, 921.

CLASSIFICATION—Notes on Col. Wall's Identification of *Hydrophis cyanocinctus*, xxvi, 682; Hand List of the Snake of the Indian Empire, Part I, xxix, 345; Part II, xxix, 598; Part III, xxix, 864; Part IV, xxx, 12; Part V, xxx, 242; Review of the Asiatic species of *Contia* in the Indian Museum, xxix, 769; The Affinities of *Eryx jaculus* and *Eryx johnei*, xxix, 842.

#### SNAKES—A Popular Treatise on the Common Indian Snakes.

Part XXIV.—*Typhlops*, xxv, 375.

Part XXV.—*Callophis maclellandi*, xxv, 628.

Part XXVI.—*Cerberus rhyncops* and *Enhydris curtus*, xxvi, 89.

Part XXVII.—*Hydrophis spiralis* and *H. cyanocinctus*, xxvi, 430.

Part XXVIII.—*Enhydrina valakdaien* and *Hydrus platurus*, var *bicolor*, xxvi, 803.

GENERAL—Notes on Some Interesting Snakes recently presented to this Society, xxvi, 683; Reply to Dr. Malcolm Smith's Remarks in the Last

Journal, xxvi, 864; Notes on Some Recent Additions to our Society's Snake Collection, xxvi, 865; Notes on Some Notable Additions to the Bombay Natural History Society's Snake Collection, xxviii, 43; Acquisition of four more Specimens of the Snake *Brachyophidium rhodogaster*, xxviii, 556; Leech attacking a Snake, xxviii, 557; The Senses of a Snake, xxvii, 1142; Mr. Bhanagay's Snake Chart, xxix, 302; Snakes and Leeches, xxix, 302; Cobra going down a Hole Tail Foremost, xxix, 303; Notes on a Collection of Snakes from Sinlum Kaba, xxix, 466; Viper and White-throat, xxx, 707.

·SNIPE—See BIRDS, SHOOTING.

SPARKE, W.—The Occurrence of *Teinopalpus imperialis* in the Toungoo Hills, Burma, xxvii, 406.

·SPECIES—Sub-species and the Field Naturalist, xxvi, 518.

·SPENCE, R. A.—The Great Indian Hornbill (*Dichoceros bicornis*), xxvii, 174; See, PRATER, S. H., xxvii, 482; xxvii, 555.

·SRINIVASARAO, H., M.A.—A Note on the Reproduction of the Common Hydra of Bengal (*Hydra vulgaris*, Pallas), xxviii, 1147.

·STABLES, R. H.—The Occurrence of the Mallard (*Anas platyrhyncha*) in Rajputana, xxix, 277.

STANSFIELD, L. A.—Mugger Shooting Experience, xxix, 1061.

·STEWART, C. G.—Feeding Habits of the Python (*Python molurus*), xxv, 150.

·STEVENS, H.—Notes on the Birds of Sikkim Himalayas, Part I, xxix, 503; Part II, xxix, 723; Part III, xxix, 1061.

·STOCKLEY, MAJOR C. H., D.S.O.—Quaint Beasts and Queer Habits, xxviii, 204; Some Notes on the Horns of the Thamin (*Cervus eldi*), plate, xxviii, 268; Notes on Lydekker's Game Animals of India (plate), xxviii, 529; Thamin Horns, xxviii, 534; An Interesting Panther Incident (photo), xxviii, 535; Notes on the Tsaine (*Bos sondaicus*), plate, xxviii, 540; Some Measurements of Big Game, xxvii, 543; Notes on Duck in the Rawalpindi District, xxviii, 548; The Tiger making the ' Sambhar Call ', xxviii, 793; Notes on Oorial, xxviii, 1126; A Journey to Siam and Back (plates), Part I, xxix, 169; Part II, xxix, 378; Part III, xxix, 718; Part IV, xxix, 974; The Measurements and Photography of Specimens of Big Game (plates), xxix, 209; Some Notes on Indian Game Birds, xxix, 278; Notes on the Migration of Duck and Teal, xxix, 279; On the Forms of the Himalayan Serow (*Capricornis sumatrensis*), (plates), xxix, 824; Comments on the Colour-change of the Black-Buck (*Antelope cervicapra*), xxix, 835.

·STONE, R. F.—The Weights of Pintail and Fantail Snipe, xxv, 306.

·SUBRAHMANYAN, T. V.—A Curious Method of Feeding noted in *Danaïa timniace*, Cram., xxvi, 1047; Life History of the ' Buprestid ' Leaf miner (*Trachys bicolor*, Kercenans), a Pest on *Butea frondosa* in Mysore (plate), xxvii, 178.

·SUTER, M., D.Sc.—Occurrence of the Tree-shrew (*Anathana wroughltoni*), at Khandala, Poona District, xxviii, 537.

SWINHOE—*See* OBITUARY.

SWITHINBANK, D.—Vegetable Diet of Common House Lizard, xxvii, 409.

TADULINGAM, C. AND RANGACHARI, K.—Note on a New Undescribed Species of *Cynodon* (plate), xxvi, 304.

TAILYOUR—Protective Colouration in Wild Animals, xxix, 469.

TAKIN—*See* MAMMALS.

TATE, G.—Abnormal Sambhar Horn, xxvii, 170.

TAVOY—*See* INSECTS (BUTTERFLIES).

THAMIN—*See* MAMMALS.

THARRAWADY—*See* BUTTERFLIES.

THOMAS, OLDFIELD, F.R.S.—The Nomenclature of the Geographical Forms of the Panolia Deer (*Cervus eldi* and its Relatives), xxv, 363; A Selection of Lectotypes of Indian Mammals, from the Co-types described by Hodgson, Gray, Elliot and others, xxv, 368; A New Species of *Nesokia* from Mesopotamia, xxvi, 422; Some New Mammals from Mesopotamia, xxvi, 745; On Small Mammals from the Kachin Province, Northern Burma, xxvii, 499; A New Arabian Hare (*Lepus omanensis cheesmani*), xxviii, 28; Note on the Nomenclature of the Northern Slow Loris, xxviii, 433.

THORN, W. S.—Notes on Tigers and Their Calls, xxix, 548.

THORNHILL, CAPT. C. M.—Some Notes on Game Birds in Mesopotamia, xxv, 486.

TICEHURST, CAPT. CLAUD B., R.A.M.C.—The Mesopotamian Bulbul, xxvi, 279; The Plumage of the Purple Honeysucker (*Arachnechthra asiatica*), xxvi, 286; The Colour of the Eye of the Female White-eyed Pochard (*Nyroca africana*), xxvi, 290; On Asiatic Starlings, xxvi, 380; An Appeal, xxvii, 931; *See* BUXTON, P. A., M.B.O.U. and CHEESMAN, Major R. E., M.B.O.U., xxviii, 210, 381, 650, 937; Bird Collectors in India, xxviii, 790; Destruction of Birds' Nests, xxviii, 798; Notes on Indian Wagtails, xxviii, 1082.

TIGERS—*See* MAMMALS.

TILDEN, H. B.—Eastern Solitary Snipe at Nalban Island, Chilka Lake, on December 16, 1921, xxviii, 1133.

TOMLIN, J. LE. W. B., M.A.—Description of a new *Galeomina* from Bombay, xxvii, 964.

TONS VALLEY—*See* BIRDS (NESTING).

TRAVERS, W. L.—*See* INGLIS, CHAS., M., F.Z.S., xxvii, 151.

TRAYLEN, G. D.—Angling around Bombay, xxvii, 535.

TREASURER'S Report on the Financial Position of the Society, xxix, 269.

TRENCH, C. G. CHEVENIX, I.C.S.—Egret Farming in India, xxviii, 751;

Occurrence of Russell's Earth Snake (*Eryx conicus*) at 3,200 ft. altitude in the C. P., xxv, 151.

TREVENEN, MAJOR W. B.—Shikar near and around Poona, xxviii, 1075 ; Appearance of the Mute Swan (*Cygnus olor*) near Poona, xxix, 287 ; Late and Early Snipe in the Deccan, Poona District, xxix, 837 ; An Unusually Large Labeo from the Indrayani River, xxix, 843.

TROUT.—Food in Kashmir, xxix, 305.

TSAINE—See MAMMALS.

TUNNARD, T. E.—Nidification of the Ceylon Thrush (*Oreocincla imbricata* Layard), xxviii, 546, 1130 ; Nidification of the Ceylon Arrenga (*Arrenga blythi*), xxviii, 1131.

TURTLES.—Habits of the Green—(*Chelonia mydas*), xxv, 508 ; The Giant Tortoise living in Ceylon, xxvi, 861 ; Breeding Habits of the Green—(*Chelonia mydas*), xxvii, 955 ; Notes on—xxix, 299 ; Description of a New Land Tortoise from Northern Persia, xxvii, 251 ; A Tentative List of the Vertebrates of the Jalpaiguri District, Bengal, Part I, xxvi, 819 ; Part II, xxvi, 988 ; Part III, xxvii, 151.

UNAO—See LIZARDS.

UPTON, T. E. T.—Late Stay of Snipe in Bengal, xxix, 296.

URIAL—See MAMMAL.

UVAROV, B. P., F.F.S.—A Contribution to our Knowledge of the Orthoptera, Acridiidea of Mesopotamia and N. W. Persia, xxvii, 803 ; Three New Alpine Orthoptera from Central Asia, xxviii, 71 ; Records and Description of the Ornithology of Cashmere, xxviii, 719 ; A Long-neglected Group of Insects, xxviii, 114 ; Some New Interesting Orthoptera from Persia, Baluchistan and Western India (plate), xxix, 643.

WAGTAILS.—See BIRDS, NIDIFICATION.

WAITE, H. W.—The Breeding of the White-eared Bulbul (*Molpastes leucotis*), xxv, 297 ; The Breeding of the Gull-billed Tern (*Sterna angelica*), xxv, 300 ; Birds of Different Species nesting in Company, xxvii, 171 ; Curious Nesting Site of the Indian Hoopoe (*Upupa indica*), xxvii, 631 ; The Marbled Duck (*Marmaronetta angustirostris*) in the Punjab, xxviii, 807 ; On the Breeding of the Black-winged Stilt (*Himantopus candidus*), xxix, 838 ; Nidification of the Black Vulture or Indian King Vulture (*Otogyps calvus*), xxix, 295 ; Breeding of the Eastern Wood Pigeon (*Palumbus casiotis*) in the Punjab Salt Range, xxix, 295.

WALKER, J. S. E.—Notes on Some Sheep shot in Ladak, xxviii, 1128.

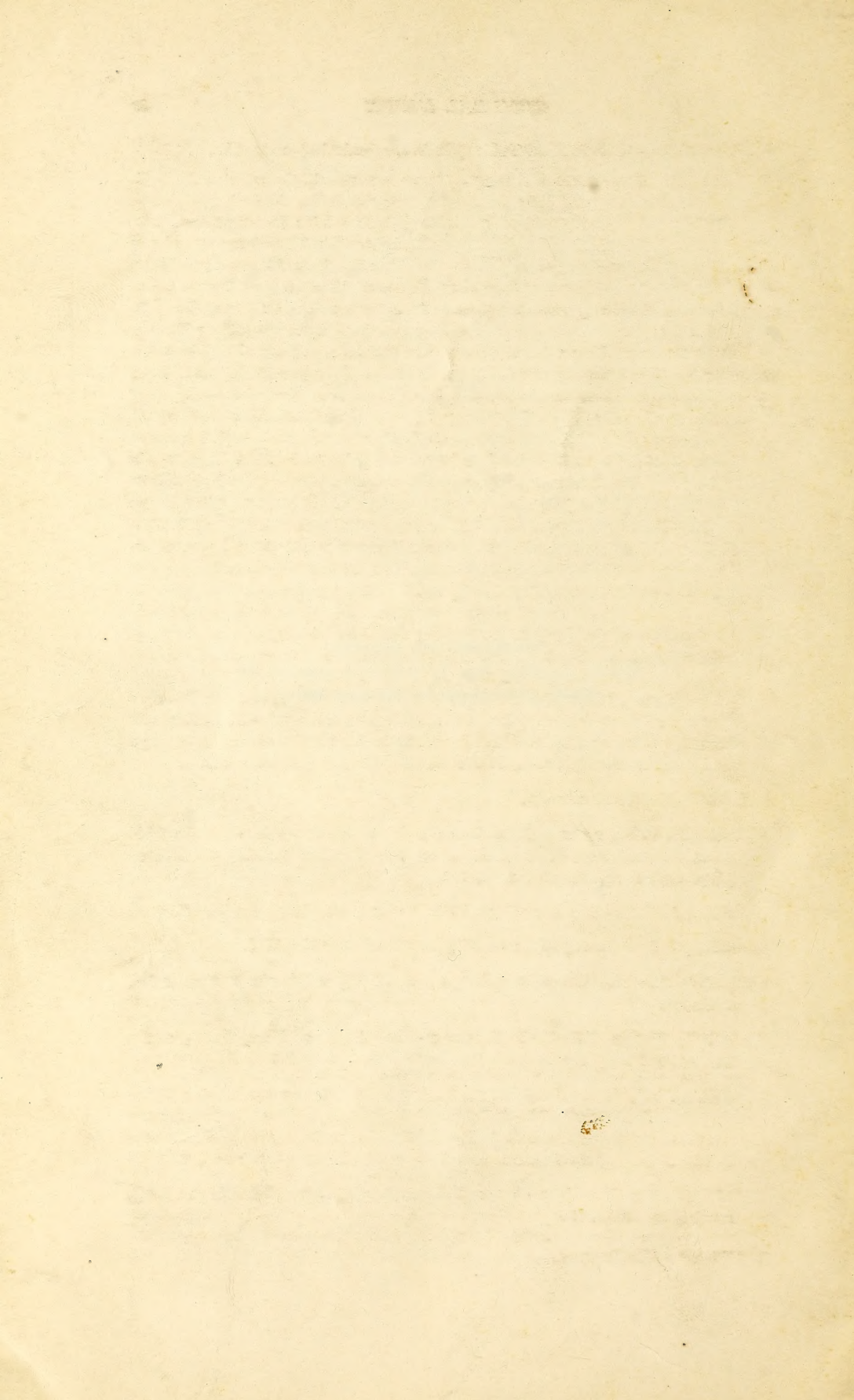
WALL, LT.-COL. F., I.M.S., C.M.G., C.M.Z.S.—Notes on an Interesting Specimen of the Sea Snake (*Hydrophis ceruleus*), xxv, 308 ; A Popular Treatise on the Common India Snakes, Parts XXIV-XXVI, (See Snakes, systematic) ; Notes on a Collection of Sea Snakes from Madras, xxv, 599 ; Occurrence of the Tree Snake (*Dendrophis pictus*) in Kumaon, xxv, 509 ; Notes on a Gravid *Hydrophis cyanocinctus* and her Brood, xxv, 754 ; Notes on the Breeding of the Rasp-skinned Water Snake (*Chersydrus granulatus*, Schneider), xxv, 756 ; The Rudimentary Hind Limbs in an Embryo of

- Python molurus*, xxvi, 862; Notes on a Collection of Snakes made in the Nilgiri Hills and the Adjacent Wynaad. *Typhlops thurstoni*, *T. fletcheri*, *Melanophidium wynadense*, *Thinophis sanguineus*, *Silybura brevis* and *Rhabdops olivaceus*, xxvi, 552; A gravid specimen of the Snake *Cylindrophis maculatus*, Linn., xxvi, 863; Reply to Dr. Malcolm Smith's Remarks in the Last Journal, xxvi, 864; Notes on Some Recent Additions to our Society's Snake Collections, xxvi, 865; A 17-Scale Krait (*Bungarus cæruleus*) from Bangalore, xxvi, 1046; Suppression of the Name of the Snake described by me as *Oligodon evansi*, xxvii, 175; A New Snake of the Family Uropeltidae (plate), xxviii, 41; Notes on Some Additions to the Bombay Natural History Society's Snake Collection (plate), xxviii, 43; Butterflies at Sea, xxviii, 293; Notes on Some Lizards, Frogs and Human Beings in the Nilgiri Hills, xxviii, 493; Hatching of Cobras (*Naia tripudians*) with remarks on the Oodont, Genitalia, etc., xxviii, 553; Acquisition of four more Specimens of the Snake *Brachyophidium rhodogaster*, Wall, xxviii, 556; Notes on a Collection of Snakes from Shembaganur Palni Hills, xxviii, 1141; Gordius Worms, xxviii, 1142; A Hand List of the Snakes of the Indian Empire, Part I, xxix, 345; Part II, xxix, 598; Part III, xxix, 864; The Homing Flight of the Common House Crow (*Corvus splendens*), xxix, 290; Mr. Bhanagay's Snake Chart, xxix, 302; Snakes and Leeches, xxix, 303; Notes on a Collection of Snakes from Shembaganur, Palni Hills, xxix, 388; Notes on a Collection of Snakes from Sinlum Kaba, xxix, 466; Review on the Asiatic Species of *Contia* in Indian Museums, xxix, 769; The Affinities of *Eryx jaculus* and *Eryx johni* xxix, 842.
- WALLACE, L. E.—See OBITUARY.
- WALSH, MAJOR W. P. PAKENHAM, R.E.—Wire Nests, xxix, 1055.
- WALTON, LT.-COL. N. J., C.M.Z.S., I.M.S.—On Red Sea Water, xxv, 761.
- WARD, LT.-COL. A. E.—Big Game Shooting in Kashmir and Adjacent Hill Provinces, Part I, xxviii, 45; Part II, xxviii, 534; Game Animals of Kashmir and Adjacent Hill Provinces, Part III, xxviii, 595; Part IV, xxviii, 874; Part V, xxix, 23; Part VI, xxix, 318; Small Game Shooting in Kashmir and Adjacent Hill Provinces, xxix, 653; The Mammal and Birds of Kashmir and the Adjacent Hill Provinces, xxix, 879.
- WARD, F. KINGDON—Distribution of the Different Races and Species of Takin (*Budorcas*), xxvi, 838; Some Observations on the Birds and Mammals of Imam Bum, xxvii, 754.
- WARE, F.—Wild Dogs (*Cuon dukhunensis*) and Sambhar, xxvi, 837.
- WASPS—See INSECTS.
- WATHEN, MRS. M. L.—Ornithological Notes from a Trip in Ladak, xxix, 694.
- WATKINS, H. T. G. AND BUXTON, P. A., M.A., F.Z.S.—Moths of Mesopotamia and N. W. Persia, Part II, xxviii, 184.
- WATSON, MAJOR H. R.—Cobras without the Cuneate Scale, xxv, 510.
- WAZIRISTAN—See BIRDS, SNAKES, LIZARDS.

- WELLS, H. W.—The Mishmi Takin (*Budorcas taxicolor*), xxix, 830.
- WHISTLER, H., M.B.O.U., F.Z.S.—Notes on the Birds of the Ambala District, Punjab, xxv, 665 ; An Addition to the Indian List of Birds, xxv, 742 ; The White-necked Stork in the Punjab, xxv, 746 ; Notes on the Birds of the Ambala District, Punjab, Part II, xxvi, 172 ; The Common Hawk Cuckoo (*Hierococcyx varius*) in the Punjab, xxvi, 287 ; Abnormal varieties of the Indian Red-start (*R. rufiventris*) and the Common House Crow (*Corvus splendens*), xxvi, 289 ; Some Birds of Ludhiana District, Punjab, xxvi, 585 ; Some Birds observed at Fagoo near Simla, xxvi, 770 ; Variety of the Common House Crow (*Corvus splendens*) at Jhang, Punjab, xxvi, 843 ; Abnormal Variety of the Green Bee-eater (*Merops viridis*), xxvi, 844 ; A Note on the Breeding of the Hill Partridges (*Arboricola torqueola*) near Simla, xxvi, 849 ; The Blue-breasted Quail (*Excalfactoria chinensis*) at Mirzapur, xxvi, 1044 ; Further Notes on Birds about Simla, xxvii, 94 ; Some Notes on the Genus *Caprimulgus* in the Punjab, xxvii, 363 ; Eversman's Red-start (*Phenicurus erythronota*, Eversen.), xxxvii, 405 ; The Call of Franklin's Nightjar (*Caprimulgus monticola*, Frankl.), xxviii, 284 ; Notes on Nest Boxes for Birds, xxviii, 460 ; An Addition to the List of Indian Birds, xxviii, 544 ; Butterflies feeding on Excreta, xxviii, 558 ; A Contribution to the Ornithology of Cashmere, xxviii, 990 ; Letter on Dr. Ticehurst's appeal for Chicks of Indian Birds, xxviii, 1107 ; A Note on the Spotted-winged Grosbeak (*Mycerobas melanocephalus*, Hodgs.), xxix, 150 ; A Note of the Corvidæ of the Punjab, xxix, 157 ; On the Breeding of Certain Wag-tails, xxix, 281 ; A Note on the Migration of the Eastern Grey Wagtail (*Motacilla cinerea melanocephala*, Pall.), xxix, 287 ; The Spotted-wing Starling (*Psaroglossa spiloptera*), xxix, 290 ; Note on a Supposed New Race of *Otocorys alpinus* (? *alpestris*), xxix, 560 ; Double Nest of the Kashmir Great Tit (*Parus major kaschmiriensis*), xxix, 837 ; The Common Flamingo (*Phenicopterus antiquorum*) in the Salt Range, Punjab, xxix, 840.
- WILD DOGS.—See MAMMALS.
- WICKHAM, P. F., P.W.D.—Miscellaneous Notes on Some Birds in the Chin Hills, Burma, xxv, 750 ; A Note on the Eastern Red-legged Falcon (*Erythropus amurensis*), xxix, 292.
- WILSON, J. C. C.—The Breeding of Elephants in Captivity, xxviii, 1128.
- WILSON, J. H.—Corrugations on Elephant Tusks, xxviii, 1125.
- WRIGHT, A.—The Bite of the Large-spotted Viper (*Lachesis monticola*), xxvi, 681.
- WRIGHT, MAJOR ROBERT E., I.M.S.—The Distance Mosquitoes can fly, xxv, 511 ; Phosphorescence in the Persian Gulf, xxv, 512.
- WROUGHTON, R. C.—See B. N. H. S., MAMMAL SURVEY OF INDIA ; Synonymies, Characters and Distribution of the Maccaques included under the name *rhesus* and *assamensis* in Blanford's Mammals, xxvii, 665 ; On the Nomenclature of the South Indian Long-tailed Maccaques, xxvii, 818.
- WYLIE, MAJOR M.—Note on the Colour-change of Black Buck (*Antelope cervicapra*), xxix, 836.
- WYNAAD.—See SNAKES.

PRINTED AND PUBLISHED  
BY GEORGE KENNETH AT THE DIOCESAN PRESS  
POST BOX 455, MADRAS—1928, C3688





**Pressboard  
Pamphlet  
Binder**  
**Gaylord Bros., Inc.**  
Makers  
**Stockton, Calif.**  
PAT. JAN. 21, 1908

SMITHSONIAN INSTITUTION LIBRARIES



3 9088 01205 0530